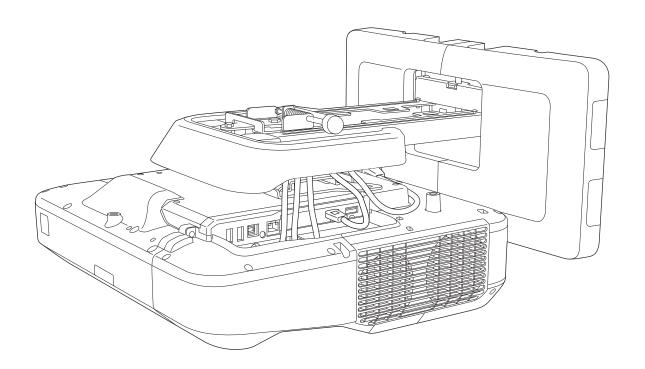


# EB-696Ui

# Installation Guide





# Safety Instructions

For your safety, read all the instructions in this guide before using this product. Incorrect handling that ignores instructions in this guide could damage this product or could result in personal injury or property damage. Keep this installation guide at hand for future reference.

Read the *User's Guide* and *Safety Instructions* for your projector and follow the instructions in these documents.

## Safety indications

The documentation and this product use graphical symbols to show how to use this product safely.

The indications and their meaning are as follows. Make sure you understand them properly before reading the guide.

Symbol	Explanation
Warning	This symbol indicates information that, if ignored, could possibly result in personal injury or even death due to incorrect handling.
<b>Caution</b>	This symbol indicates information that, if ignored, could possibly result in personal injury or physical damage due to incorrect handling.

# **Explanation of Symbols**

Symbols	Explanation
$\Diamond$	Symbol indicating an action that must not be done
0	Symbol indicating an action that should be done
#	Symbol indicating related or useful information

# Safety Precautions for Installation

<u></u> Warning			
The setting plate is exclusively for mounting the projector on a wall. If anything other than a projector is mounted, the weight may result in damage.	0		
If this product falls, it could cause death or personal injury.			
The installation work (wall mounting) should be performed by specialists who have technical knowledge and ability. Incomplete or incorrect installation could cause the product to fall and cause personal injury or property damage.	•		
Follow the instructions in this guide when installing this product.	Ω		
If the instructions are not followed, this product may fall, resulting in personal injury or an accident.			

Handle the power cord carefully.	
Incorrect handling may cause fire or electric shock. Observe the following precautions when handling:	•
<ul> <li>Do not handle the power plug with wet hands.</li> <li>Do not use a power cord that is damaged or modified.</li> <li>Do not pull the power cord with too much force when routing the cable through the setting plate.</li> </ul>	
Do not install the setting plate in a place where it might be subjected to vibration or shock.	$\bigcirc$
This could cause damage to the projector or mounting surface. If this product falls, it could cause death or personal injury.	
Install the setting plate so that it can sufficiently support the mass of the projector and setting plate, and resist any horizontal vibration. Use M10 nuts and bolts.	0
Nuts and bolts smaller than M10 could cause the setting plate to fall. Epson accepts no responsibility for any damage or injury caused by lack of wall strength or inadequate installation.	
The installation work should be performed by at least two qualified service personnel. If you need to loosen any screws during installation, be careful not to drop this product.	•
If this product falls, it could cause death or personal injury.	
When mounting this product on a wall, the wall requires enough strength to hold the projector and the setting plate.	0
This product should be installed on a concrete wall. The maximum combined weight of the projector and the setting plate is approximately 16 kg (not including cables). Ensure the strength of the wall before mounting this product on the wall. If the wall is not strong enough, reinforce the wall before installation.	
Inspect the setting plate on a regular basis to ensure there are no broken parts or loose screws.	$\bigcirc$
If any parts are damaged, stop using the setting plate immediately. If this product falls, it could cause death or personal injury.	
Do not disassemble or remodel this product.	$\bigcirc$
There are numerous high-voltage sections inside the product that could cause a fire, electric shock, or an accident.	0
Do not hang on this product or hang a heavy object on this product.	$\bigcirc$
If this product falls, it could cause death or personal injury.	O .
Do not use adhesives, lubricants, or oils to install or adjust the setting plate.	$\bigcirc$
If you use adhesives to prevent the screws from loosening or things such as lubricants or oils on the slide plate fixing part of the projector, the case may crack and cause the projector to fall, resulting in personal injury or property damage.	0
Tighten all screws firmly after adjustment.	
Otherwise, the product may fall and cause personal injury or property damage.	
Never loosen the bolts and nuts after installation.	0
Confirm that the screws have not become loose on a regular basis. If you find any loose screws, tighten them firmly. Otherwise, the product may fall and cause personal injury or property damage.	
Route the cables so that they are not interfered with the nuts and bolts.	
Incorrect handling of the cables may cause fire or electric shock.	•

<u></u> Warning	
When turning on the projector, do not look into the projection window.	$\overline{\bigcirc}$
This could cause damage to eyesight due to the powerful light emitted. Take particular care when there are children present. When turning on the projector at a distance using the remote control, make sure there is no one looking into the projection window.	
When using the projector, do not place any objects or put your hand near the projection window.	$\Diamond$
This area is dangerous as it reaches a high temperature due to the concentrated projection light.	
Do not cover the projector's air intake vent or air exhaust vent. If either of the vents are covered, the internal temperature could rise and cause a fire.	$\Diamond$
Avoid locations subject to high temperatures, such as close to heaters, and leave a gap of at least 50 cm between the wall and the air exhaust vent.	
Do not use the projector in a location subject to combustible or explosive gas.	$\bigcirc$
The projector may catch fire because of the high temperature of the lamp inside the projector.	0
If any abnormalities occur with this product, immediately disconnect the cables from the product, and then contact your local dealer or the nearest Epson service call center.	•
Continuing to use the product in an abnormal condition could cause a fire, electric shock, or visual impairment.	
<u> Caution</u>	
Do not install this product in a location where the operating temperature for your projector model may be exceeded.	$\bigcirc$
Such an environment may damage the projector.	
Install this product in a place free from excessive dust and humidity to prevent the lens or optical components from becoming dirty.	•
Do not use excessive force when adjusting this product.	$\bigcirc$
This product may break, resulting in personal injury.	

# Notes on handling the Touch Unit

<u></u> Warning	
Do not disassemble or remodel the Touch Unit.	
The Touch Unit contains a high power laser product that could cause a fire, electric shock, or an accident.	<u> </u>
Only connect the Touch Unit to the EB-696Ui. Do not connect it to any other projectors or devices.	$\Diamond$
The device could malfunction, or laser light that is higher than normal intensity could be emitted.	
Do not go near the Touch Unit if you are using medical equipment such as a pace maker. Furthermore, when using the Touch Unit, make sure there is no one using medical equipment such as a pace maker, in the surrounding area.	0
A powerful magnet within the unit generates electromagnetic interference which may cause medical equipment to malfunction.	



Do not go near the Touch Unit with magnetic storage media such as magnetic cards, or precision electronic devices such as computers, digital watches, or mobile phones.



A powerful magnet within the unit could corrupt data or cause a malfunction.

# About This Installation Guide

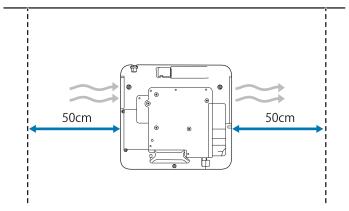
This guide describes how to mount the ultra short-throw projector EB-696Ui on a wall. It also explains how to install the Touch Unit after mounting on a wall.



# Choosing an Installation Location

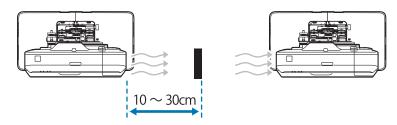
### Projector installation location

- Carry out power supply wiring work for the installation location of the setting plate in advance.
- Install the projector away from other electric devices such as fluorescent lights or air conditioners. Some kinds of fluorescent lights could interfere with the remote control of the projector.
- When installing the projector, make sure there is a gap of at least 50 cm from the wall to the projector's air exhaust and intake vents on the left and right.



• When installing two or more projectors in parallel, make sure the temperature of the surrounding environment is less than 35°C.

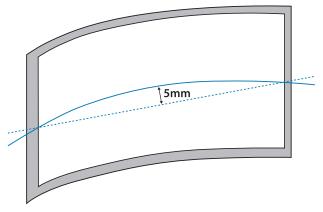
If the environment is too hot, the projector may overheat and the power may turn off without warning. When using the projector in an environment of 35°C or more, install a partition to block the heat vented from the projector's air exhaust vent. Make sure the partition is slightly larger than the exhaust vent (approx. 2 cm wider and taller), and then install the partition 10 to 30 cm from the exhaust vent.



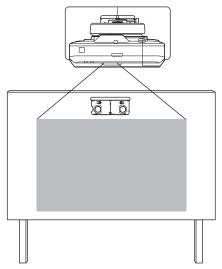
- It is recommended to keep connection cable length less than 20 meters to reduce external noise.
- We recommend using stick-on screens or board screens.
- Install the projector so that it is tilted at an angle of no more than ±3° vertically and horizontally in relation to the screen.
- When using the interactive function (Easy Interactive Function), install so that the projected image is within reach.
- Do not install the projector or the screen in a location subject to direct sunlight. If the projector or the screen are subject to direct sunlight, the interactive function may not operate correctly.

## Touch Unit installation location

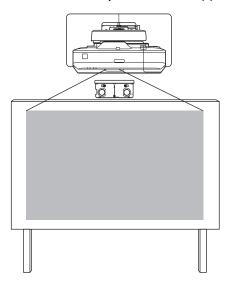
- When using the Touch Unit, install the projector using one of the following methods. The Touch Unit cannot be used if another installation method is used.
  - Mount the projector on a wall or suspend it from a ceiling and project images from in front of the screen.
  - Install vertically on a table and project from the front of the desk. (When installing vertically on a table, you need the optional Interactive Table Mount (ELPMB29).)
- Before installing the Touch Unit, make sure that the installation surface is not warped or distorted, and that any unevenness on the screen surface is less than 5 mm.



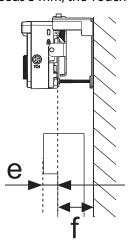
• When installing the Touch Unit on a whiteboard, secure the Touch Unit with magnets or screws.



• When installing the Touch Unit outside the whiteboard, you need the supplied Touch Unit Bracket.



- If the distance from the wall to the surface of the screen (f) is more than 51 mm, you cannot install the Touch Unit outside the whiteboard.
- If there is a frame around the screen, make sure that the thickness of the top of the frame (e) is less than 3 mm. If the thickness of the top of the screen exceeds 3 mm, the Touch Unit will not operate correctly.



Using the Product Safely	16:10 projected image 27
Safety Instructions 1	Installing the Setting Plate 28
Safety indications	Connecting Devices 28
Explanation of Symbols	Necessary cables 28
Safety Precautions for Installation	Installation Procedure
Notes on handling the Touch Unit	Assemble the parts
About This Installation Guide 4	Install the wall plate on the wall
Choosing an Installation Location 5	Determine the projection distance, and then pass the cables through the setting plate 35
Projector installation location 5	Attaching the setting plate to the wall plate 37
Touch Unit installation location 6	Securing the projector to the setting plate 39
	Adjusting the Position of the Projector 41
Installation Guide	Sticking the infrared deflectors
Installation Work Flow 10	Arc Correction
Installing one projector 10	Calibrating the pen
When two or more projectors are installed in	Attaching the Covers
parallel	Installing the Touch Unit 56
Package Contents 12	When installing the Touch Unit outside the
Setting plate	whiteboard (using the Touch Unit Bracket) 56
Touch Unit	Installation Procedure 56
Touch Unit Bracket 13	Angle Adjustment 61
Specifications	Touch Calibration
Setting plate	When installing the Touch Unit on the
Wall plate cover	whiteboard (without using the Touch Unit Bracket)
Wall plate	Installation Procedure
Vertical slide adjustment range 15	Angle Adjustment
Horizontal slide adjustment range 16	/gic / ajastine
Forward/backward slide adjustment range 16	Appendix
Position for installing accessories 17	Installing Multiple Projectors in
Touch Unit	Parallel (Multi-Projection) 88
Touch Unit (external dimensions/weight) 17	Multi-Projection settings
Touch Unit Bracket (external dimensions/ adjustment range/weight) 17	Setting the Projector ID
Attached labels	Adjusting the Image in Multi-Projection 91
Laser diffusion port	When two projectors are installed in parallel
·	and you are using the interactive function 92
Projection Distance Table 20	Setting the projectors in sync 93
Figures of Installation Dimensions	Setting Multi-Projection Interactive 94
When installing the Touch Unit	Batch Setup Function 101
When Projected Image is Smaller than 85 Inches 24	Setup Using a USB flash drive 102
16:10 projected image	Saving settings to the USB flash drive 102
When Projected Image is 85 inches or more 26	

#### Contents

Conoral Notice	100
Attaching a Security Cable 1	108
When Setup Fails	107
Copying saved settings to other projectors .	106
Saving settings to a computer	105
Setup by Connecting the Computer and Projector with a USB Cable	105
Copying saved settings to other projectors .	104



# **Installation Work Flow**

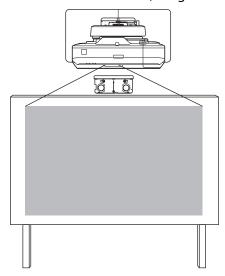
## Installing one projector

Follow the procedures below to mount the projector on a wall.

- 1 Installing the Setting Plate and the Projector ( p.28)
- Adjusting the Position of the Projector (p.41)
- 3 Calibrating the Interactive Pen (**☞** p.49)

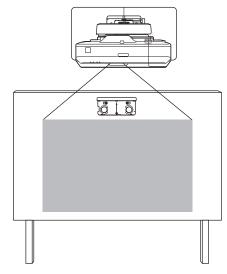
When installing the Touch Unit, finish installing the projector first, and then follow the procedures below. The procedure differs depending on where the Touch Unit is to be installed.

When installing the Touch Unit outside the whiteboard (using the Touch Unit Bracket)



- 1 Installing the Touch Unit ( p.56)
- Adjusting the Angle of Laser Diffusion ( p.61)
- Performing Touch Calibration ( p.77)

When installing the Touch Unit on the whiteboard (without using the Touch Unit Bracket)



- 1 Installing the Touch Unit ( p.80)
- 2 Adjusting the Angle of Laser Diffusion ( p.84)

Performing Touch Calibration ( p.77)

#### When two or more projectors are installed in parallel

When using the multi-projection function (when multiple projectors are installed in parallel to project one, large screen), follow the steps below.

- Installing the Setting Plate and the Projector ( p.28)
- Adjusting the Position of the Projector (p.41)
- 3 Setting the Projector ID (**☞** p.88)
- 4 Adjusting the Image in Multi-Projection ( p.91)

When two projectors are installed in parallel and you want to use the interactive function, make the following settings. Make the settings for each projector.

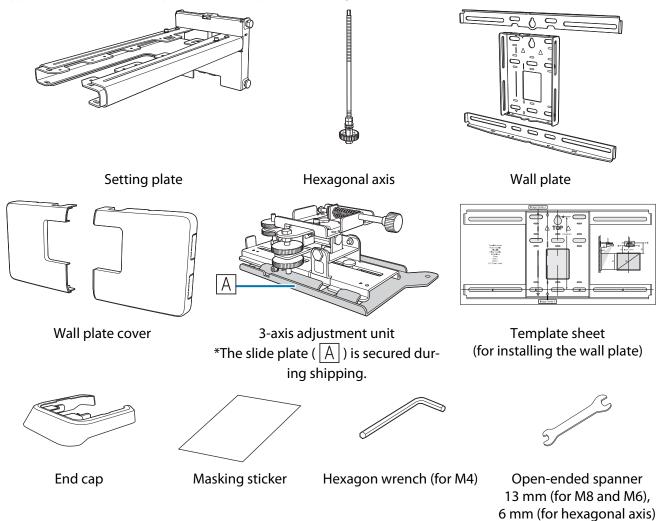
- Setting Projector Synchronization ( p.93)
- 2 Setting Multi-Projection Interactive ( p.94)



# Package Contents

## Setting plate

The following supplied items are necessary to mount the projector on a wall. Confirm that you have all items before beginning. Depending on the area in which you purchased the product, the Setting Plate is not supplied. In this situation, purchase the optional Setting Plate (ELPMB46).



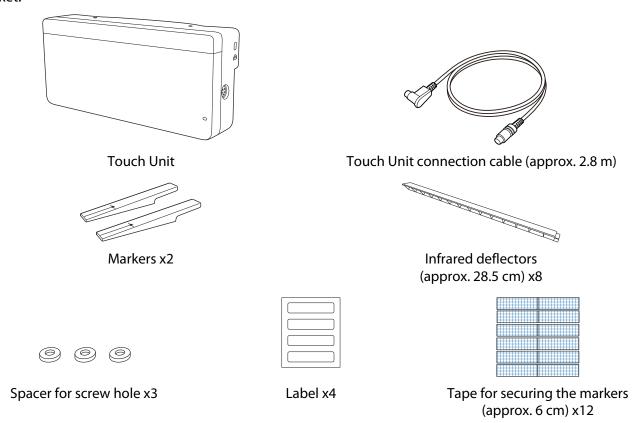
Shape	Name	Quan- tity	Application
<b>%</b>	M4 x 12 mm hexagon socket head cap bolt with washer/spring washer	5	For wall plate assembly
		4	For 3-axis adjustment unit/arm installation
		4	For slide plate/projector installation
O <sub>B</sub>	M6 x 20 mm hexagon shoulder head bolt with washer/spring washer	1	For setting plate/wall plate installation
	M6 x 20 mm cross recessed head shoulder screws with plastic washers	3	

- Use the bolts or screws supplied with this product to install it as directed in this guide. Do not substitute these bolts with any other types.
- You need to use commercially available M10 x 60 mm anchors (at least 4) and one M10 screw to attach the wall plate to the wall.

• Gather the tools and parts you need before you begin installation.

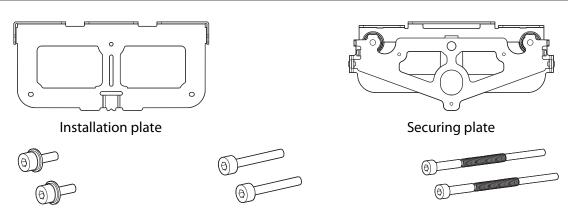
#### Touch Unit

The following supplied products are necessary when attaching the Touch Unit. Confirm that you have all items before beginning. When installing the Touch Unit outside the whiteboard, use the supplied Touch Unit Bracket.



When installing the Touch Unit on a non-magnetic whiteboard, prepare three commercially available M4 screws.

#### **Touch Unit Bracket**



M4 x 10 mm hexagon socket head M4 x 25 mm hexagon socket head M4 x 55 mm hexagon socket head cap cap bolts x2 cap bolts x2

bolt x1

M4 x 70 mm hexagon socket head cap bolt x1

For the installation plate, you also need three commercially available 4 mm diameter wood screws, or three M4 anchor bolts.



# Specifications

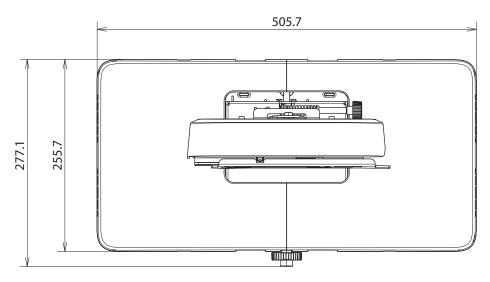
# Setting plate

ltem	Specification	Remark	Reference Page
Setting plate weight	Approx. 7.2 kg	Setting plate (2.9 kg), 3-axis adjustment unit (1.0 kg), slide plate (0.6 kg), wall plate (2.0 kg), wall plate cover and end cap (0.7 kg)	
Maximum load capacity	9.5 kg		
Forward/backward slide adjustment range	13 to 350 mm	Arm slide adjustment range: 0 to 263 mm Adjustment for 3-axis adjustment unit in- stallation position: 87 mm	See the fig- ure below
Vertical slide adjustment range	±38 mm		See the fig- ure below
Horizontal roll adjustment range	±3°	Fine adjustments possible with adjustment dial	<b>☞</b> p.41
Horizontal rotation adjustment range	±8°	Fine adjustments possible with adjustment dial	<b>☞</b> p.41
Vertical tilt adjustment range	±3°	Fine adjustments possible with adjust- ment dial	<b>☞</b> p.41
Horizontal slide adjustment range	±45 mm		See the fig- ure below

# Wall plate cover

The following dimensions apply when attaching the wall plate cover.

[Unit: mm]

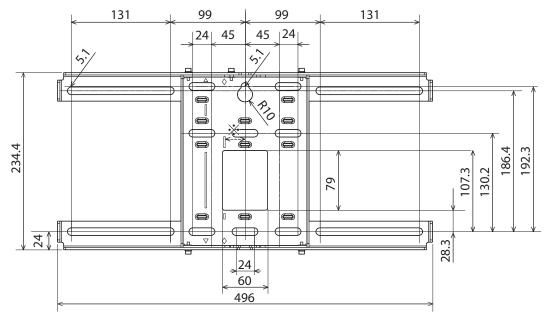


When installing the wall plate cover, you need a space of approximately 263 mm from the center of the wall plate to the left side, and approximately 253 mm to the right side.

## Wall plate

The following figure shows two frames connected to one plate (separate when shipped).

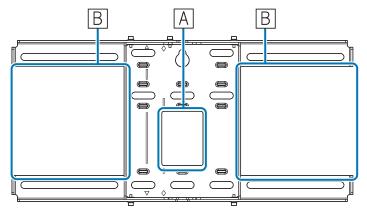
[Unit: mm]



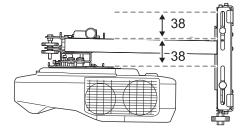
<sup>\*</sup>The offset value for the position of the center of the projected image and the center of the wall plate is 27 mm.

## Cable routing holes

When routing cables to connect to the projector through a wall, use positions ( $\boxed{\mathbb{A}}$ ) and ( $\boxed{\mathbb{B}}$ ) in the following figure as the cable routing holes.

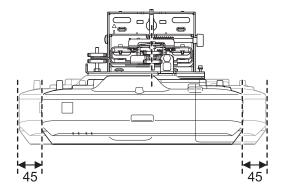


# Vertical slide adjustment range



# Horizontal slide adjustment range

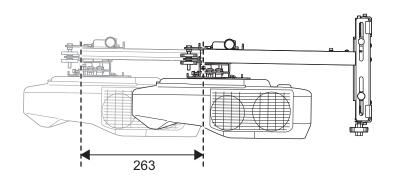
[Unit: mm]



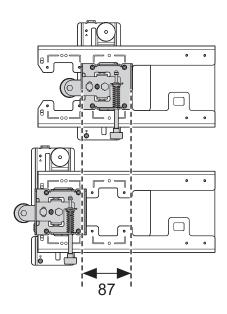
# Forward/backward slide adjustment range

# Arm slide adjustment range

[Unit: mm]



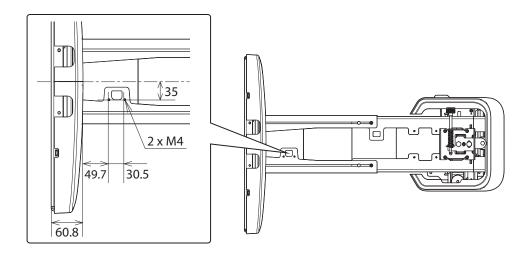
# Adjustment range for 3-axis adjustment unit installation position



## Position for installing accessories

These screw holes allow you to secure peripheral devices and accessories such as external tuners. Use commercially available M4 screws.

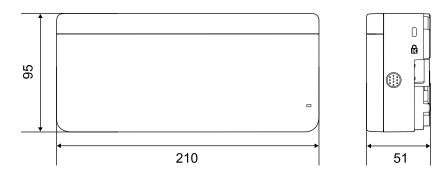
[Unit: mm]



# Touch Unit

Touch Unit (external dimensions/weight)

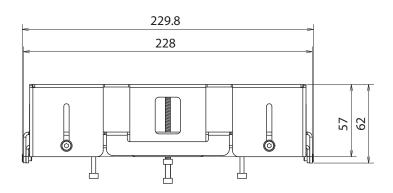
[Unit: mm]



The Touch Unit weighs approximately 450 g.

Touch Unit Bracket (external dimensions/adjustment range/weight)

Top

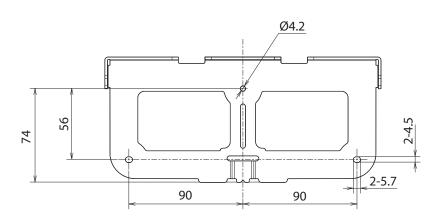


#### **Front**

101.8

[Unit: mm]

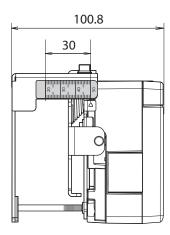
## Installation plate (front)



[Unit: mm]

When the Touch Unit is installed (side)

[Unit: mm]

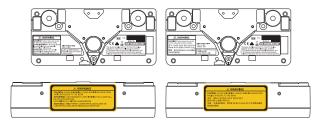


Touch Unit Bracket weights approximately 750 g.

#### Attached labels

The Touch Unit is a Class 1 laser product that conforms to the IEC/EN60825-1:2007 standard. There are warning labels affixed to the Touch Unit to indicate that it is a Class 1 laser product.



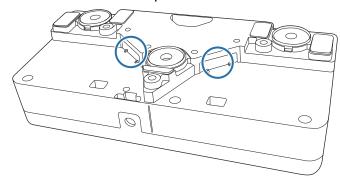


The labels contain the following information.

- Class 1 laser product
- Warning: Do not open the case. The device contains a high power laser product.
- Warning:
  - Caution: If this section is opened, class 3B invisible laser radiation will be emitted.
  - Avoid exposure to the radiation beams.

### Laser diffusion port

The laser beam is diffused from the laser diffusion ports at the back of the Touch Unit.





# **Projection Distance Table**

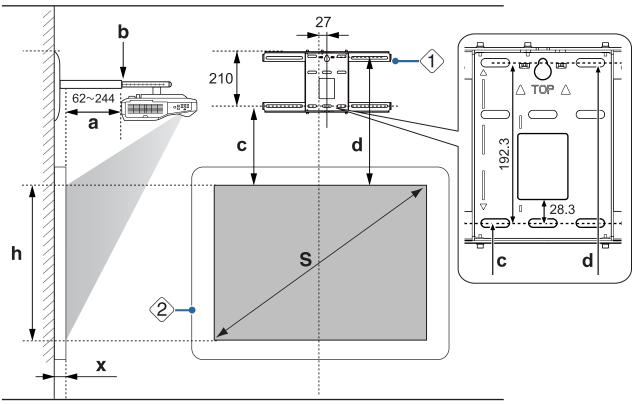
# Figures of Installation Dimensions

To find the appropriate projection distance, see the following figures when installing. The values are only rough estimates.

The recommended range for the projection distance (a) is 62 to 244 mm.

The offset value for the position of the center of the projected image and the center of the wall plate is 27 mm.

[Unit: mm]



- S: Projected image size
- a: Minimum projection distance (Wide: maximum zoom)

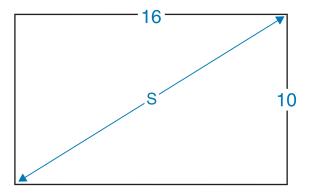
to maximum (Tele: minimum zoom)

- **b**: Numbers on the arm slide scale
- **c**: Distance from the top of the projected image to the bottom wall plate installation screw hole
- d : Distance from the top of the projected image to the wall plate temporary securing screw hole
- h: Height of projected image
- X: Distance from surface of screen to wall (100 mm or less)

Aspect ratio for standard projected image

1: Wall plate

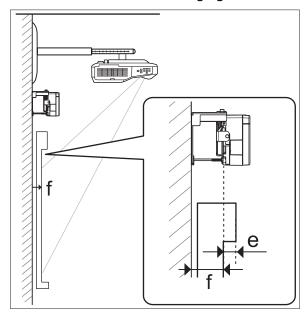
🥱 . Screer



#### When installing the Touch Unit

By using the supplied Touch Unit Bracket, you can install the Touch Unit outside the whiteboard.

When installing the Touch Unit outside the whiteboard, measure the length from the surface where the Touch Unit is installed to the whiteboard surface ((f) in the following figure).



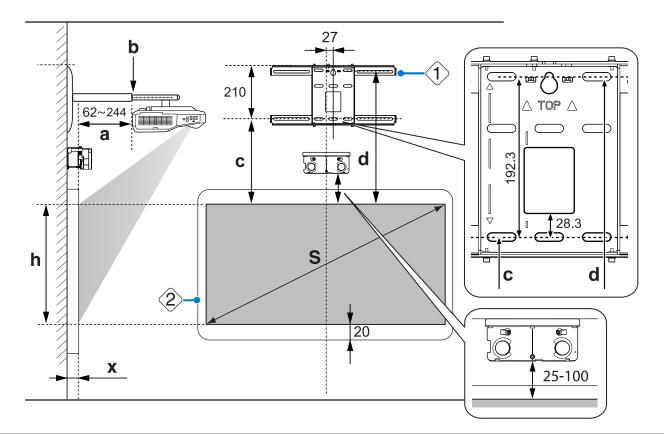
- When (f) is 20 to 50 mm, you can install the Touch Unit outside the whiteboard using the bracket.
- When (f) is less than 20 mm or more than 50 mm install the Touch Unit on the whiteboard.
- When the thickness of the top of the frame (e) is 3 mm or more, install the Touch Unit on the whiteboard.



#### Caution

Install the bottom edge of the Touch Unit so that it is 25 to 100 mm from the top edge of the projected image. If there are obstacles between the projected image and the Touch Unit such as cables, whiteboard trays, or holders, the Touch Unit will not operate correctly.

When the Touch Unit is installed outside the whiteboard (using the Touch Unit Bracket)

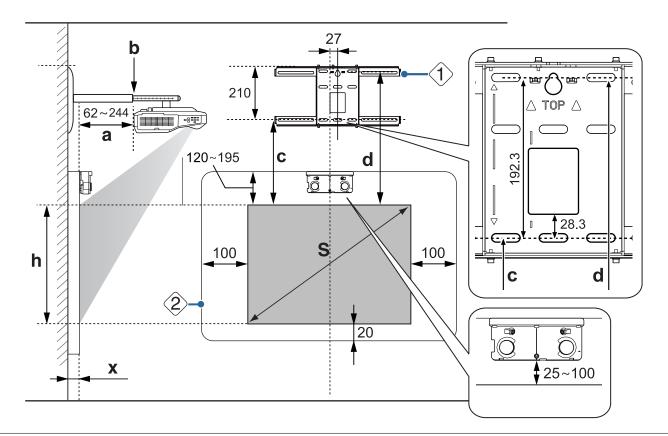




If there are any obstacles such as a frame or tray at the bottom of the screen, touch operations will not operate correctly. Stick the supplied infrared deflectors along the locations of the obstacles ( p.47). Make sure there is a space of approximately 20 mm between the place where the infrared deflector is stuck and the bottom of the projected image.

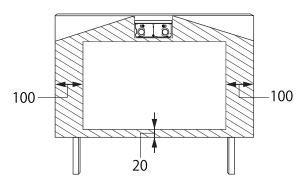
When installing the Touch Unit on the whiteboard (without using the Touch Unit Bracket)

You need to leave at least 120 mm distance between the top edge of the projected image and the top edge of the actual screen.





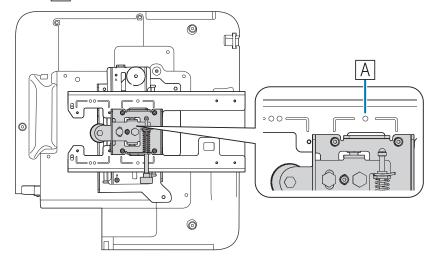
- If there are any obstacles such as a frame or tray at the bottom of the screen, touch operations will not operate correctly. Stick the supplied infrared deflectors over the locations of the obstacles (p.47). Make sure there is a space of at least 20 mm between the place where the infrared deflector is stuck and the bottom of the projected image.
- If there are obstacles in the shaded areas in the following figure, such as cables, whiteboard trays, holders, or a thick frame, touch operations will not operate correctly.



# When Projected Image is Smaller than 85 Inches

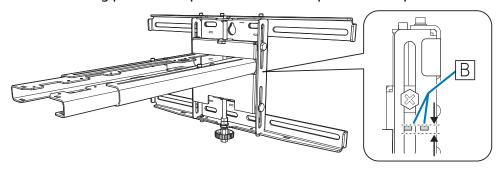
Mount the 3-axis adjustment unit at the position marked with a  $\bigcirc$  stamp ( $\boxed{\mathbb{A}}$ ).

The projection distance table provides the figures when mounting the 3-axis adjustment unit at the position marked with a  $\bigcirc$  stamp ( $\boxed{A}$ ).



The distance from the top of the projected image to the bottom wall plate installation screw hole (c) is the number given when the vertical slide is set to the standard position ( $\boxed{\mathsf{B}}$ ).

Match the notch on the setting plate to the position of the stamp on the wall plate.



# 16:10 projected image

[Unit: cm]

S		a	b	С	d	h
Projected image size		Projection Distance Minimum (Wide) to Maximum (Tele)	Numbers on the arm slide scale	Distance to the bottom wall plate in- stallation screw hole	Distance from the top of the projected im- age to the wall plate tempora- ry securing screw hole	Height of projected image
70"	150.8x94.2	5.6 to 20.9	16.5 to 31.8	21.4	40.6	94.3
71"	152.9x95.6	6.2 to 21.8	17.1 to 32.7	21.7	40.9	95.6
72"	155.1x96.9	6.8 to 22.6	17.7 to 33.5	22.0	41.2	96.9
73"	157.2x98.3	7.4 to 23.5	18.3 to 34.4	22.3	41.5	98.3
74"	159.4x99.6	8.1 to 24.3	19.0 to 35.2	22.6	41.8	99.6
75"	161.5x101.0	8.7 to 25.2	19.6 to 36.1	22.8	42.0	101.0
76"	163.7x102.3	9.3 to 26.0	20.2 to 36.9	23.1	42.3	102.3
77"	165.9x103.7	10.0 to 26.9	20.9 to 37.8	23.4	42.6	103.7
78"	168.0x105.0	10.6 to 27.7	21.5 to 38.6	23.7	42.9	105.0
79"	170.2x106.3	11.2 to 28.6	22.1 to 39.5	24.0	43.2	106.3
80"	172.3x107.7	11.8 to 29.4	22.7 to 40.3	24.2	43.4	107.7
81"	174.5x109.0	12.5 to 30.3	23.4 to 41.2	24.5	43.7	109.1
82"	176.6x110.4	13.1 to 31.0	24.0 to 41.9	24.8	44.0	110.4
83"	178.8x111.7	13.7 to 31.0	24.6 to 41.9	25.1	44.3	111.7
84"	180.9x113.1	14.4 to 31.0	25.2 to 41.9	25.4	44.6	113.0

Images smaller than 70 inches are not projected correctly.

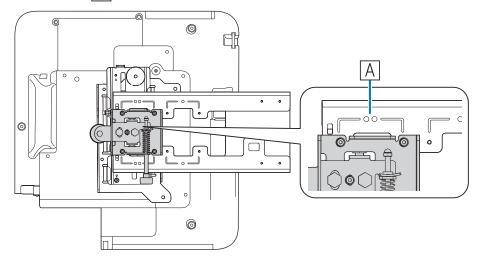


- The values are only rough estimates. The value may differ depending on the location where you place the projector.
- When projecting in Tele, the quality of the projected images may decrease.

# When Projected Image is 85 inches or more

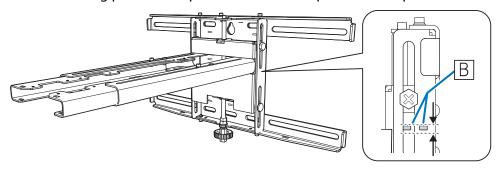
Mount the 3-axis adjustment unit at the position marked with a  $\bigcirc\bigcirc$  stamp ( $\boxed{\mathbb{A}}$ ).

The projection distance table provides the figures when mounting the 3-axis adjustment unit at the position marked with a  $\bigcirc\bigcirc$  stamp ( $\boxed{A}$ ).



The distance from the top of the projected image to the bottom wall plate installation screw hole (c) is the number given when the vertical slide is set to the standard position ( $\boxed{\mathsf{B}}$ ).

Match the notch on the setting plate to the position of the stamp on the wall plate.



# 16:10 projected image

[Unit: cm]

S		a	b	С	d	h
Projected image size		Projection Distance Minimum (Wide) to Maximum (Tele)	Numbers on the arm slide scale	Distance to the bottom wall plate installa- tion screw hole	Distance from the top of the projected im- age to the wall plate tempora- ry securing screw hole	Height of projected im- age
85"	183.1x114.4	15.0 to 33.7	17.2 to 35.9	25.6	44.8	114.5
86"	185.2x115.8	15.6 to 34.5	17.8 to 36.7	25.9	45.1	115.8
87"	187.4x117.1	16.2 to 35.3	18.4 to 37.5	26.2	45.4	117.1
88"	189.5x118.5	16.9 to 36.2	19.1 to 38.4	26.5	45.7	118.5
89"	191.7x119.8	17.5 to 37.0	19.7 to 39.2	26.8	46.0	119.8
90"	193.9x121.2	18.1 to 37.9	20.3 to 40.1	27.1	46.3	121.1
91"	196.0x122.5	18.7 to 38.7	20.9 to 40.9	27.3	46.5	122.5
92"	198.2x123.9	19.4 to 39.6	21.6 to 41.8	27.6	46.8	123.9
93"	200.3x125.2	20.0 to 39.7	22.2 to 41.9	27.9	47.1	125.2
94"	202.5x126.5	20.6 to 39.7	22.8 to 41.9	28.2	47.4	126.5
95"	204.6x127.9	21.3 to 39.7	23.5 to 41.9	28.5	47.7	127.8
96"	206.8x129.2	21.9 to 39.7	24.1 to 41.9	28.7	47.9	129.3
97"	208.9x130.6	22.5 to 39.7	24.7 to 41.9	29.0	48.2	130.6
98"	211.1x131.9	23.1 to 39.7	25.3 to 41.9	29.3	48.5	131.9
99"	213.2x133.3	23.8 to 39.7	26.0 to 41.9	29.6	48.8	133.2
100"	215.4x134.6	24.4 to 39.7	26.6 to 41.9	29.9	49.1	134.6

Images larger than 100 inches are not projected correctly.



- The values are only rough estimates. The value may differ depending on the location where you place the projector.
- When projecting in Tele, the quality of the projected images may decrease.

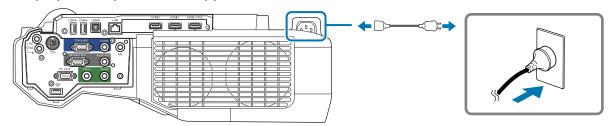


# Installing the Setting Plate

# **Connecting Devices**

# Necessary cables

Be sure to prepare the power cord supplied.



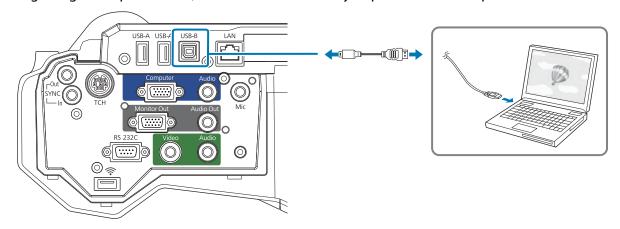
Additionally, prepare the necessary cables according to the devices being used.

- USB cable supplied
- Touch Unit connection cable supplied
- Optional computer cables and other cables (prepare according to the connected devices)

For details, see the projector's User's Guide (on the Document CD-ROM).

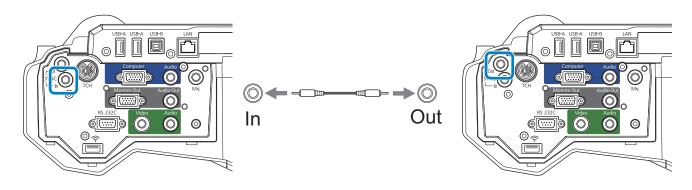
Necessary cables when using the Easy Interactive Function

When performing mouse operations using the Easy Interactive Function, you need a USB cable. Even when projecting using a computer cable, a USB cable is necessary to perform mouse operations.



Necessary cables when installing two projectors in parallel and using the Easy Interactive Function

When using the interactive function with two projectors installed in parallel, you need the optional remote control cable set (ELPKC28).

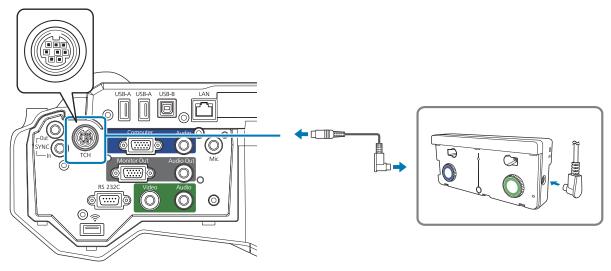


When connecting one computer to two projectors and using the interactive function, connect a USB cable from the computer to each projector. You need a computer with two USB-A ports.

#### Necessary cables when installing the Touch Unit

You need the supplied Touch Unit connection cable when installing the Touch Unit and connecting it to the projector. Operations are not performed correctly with a commercially available cable.

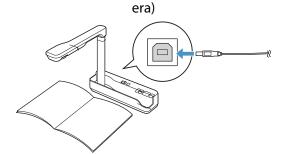
The shape of the plug that connects to the projector and the plug that connects to the Touch Unit differ. See the following figure to connect to the correct ports.



Prepare cables for the connected devices (example)

Document camera

Dedicated USB cable (supplied with document cam-

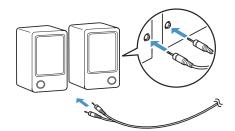


Computer

Computer cable (optional accessory)



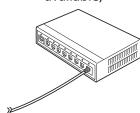
External speakers
Audio cable (commercially available)



Microphone (commercially available)



LAN device LAN cable (commercially available)



#### **Installation Procedure**

Make sure to follow the steps below to install the setting plate. If these steps are not followed, the product could fall and cause personal injury or property damage.

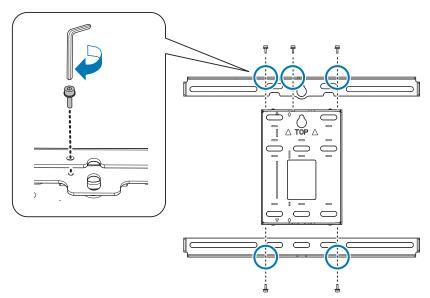


# Warning

Do not use adhesives, lubricants, or oils to install or adjust the setting plate. If you use adhesives to prevent the screws from loosening or things such as lubricants or oils on the slide plate fixing part of the projector, the case may crack and cause the projector to fall, resulting in personal injury or property damage.

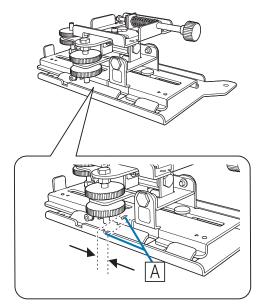
# Assemble the parts

Connect the plate and frames (x2) and secure with the M4 x 12 mm bolts (x5) supplied

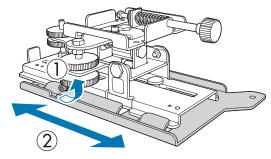


2

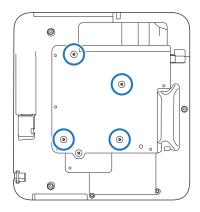
Check that the 3-axis adjustment unit is aligned with the slide plate's standard position  $(\boxed{\mathbb{A}})$ .

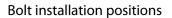


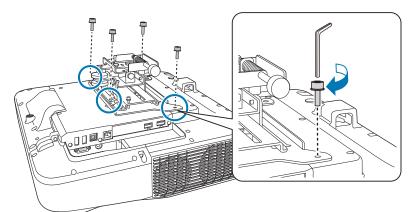
If the standard position ( $\boxed{\mathbb{A}}$ ) is not correct, loosen the M4 bolt and adjust the position of the slide plate. When you have finished making adjustments, tighten the bolt.



Secure the 3-axis adjustment unit and the slide plate to the base of the projector with the M4 x 12 mm bolts (x4) supplied







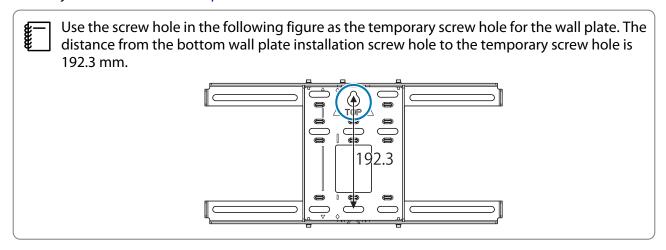
## Install the wall plate on the wall



#### Determine the projection position based on the projected image size

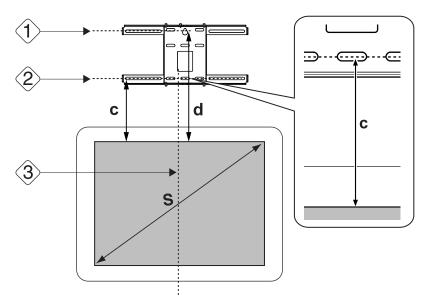
See the projection distance table to check the following values.

- Projected image size (S)
- Distance from the top of the projected image to the bottom wall plate installation screw hole (c)
- Distance from the top of the projected image to the wall plate temporary securing screw hole (d)
- "Projection Distance Table" p.20



We recommend marking the following positions. These will be the basis for determining the mounting position of the wall plate.

- Position of the temporary screw hole ( 1 )
- Position of the bottom wall plate installation screw hole (  $\langle 2 \rangle$  )
- Center line ( 3 ) of the projected image



2

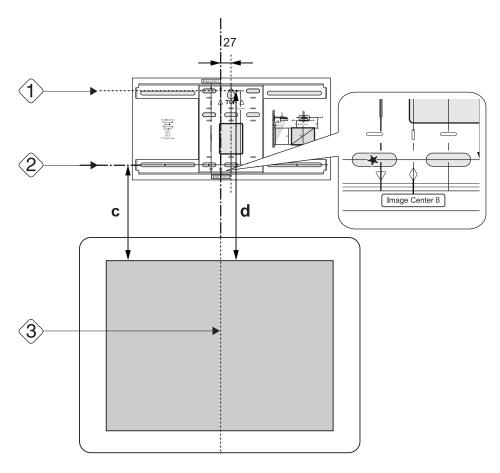
#### Attach the template sheet to the wall

- Match the center line ( ③ ) checked in step 1 to the **Image Center B** line on the template sheet.

  Confirm where the beams are within the wall, and shift the position left or right as necessary.

  (The position can be shifted horizontally left or right from the center line of the projection surface up to a maximum of 45 mm.)
- Match the height ( 1 ) and ( 2 ) checked in step 1 to the  $\bigstar$  lines on the template sheet.

[Unit: mm]

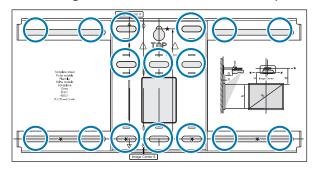


Drive a commercially available M10 screw into the position of the temporary screw hole for the wall plate

Leave a gap of 6 mm or more between the wall and the screw head.

Determine the positions for the mounting holes for the wall plate

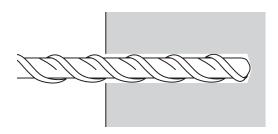
From the screw holes shown in the figure below, secure at least four points for optimum balance.



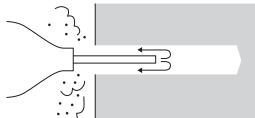
5

Drill the holes in the wall

Drill diameter: 10.5 mm Pilot hole depth: 45 mm Anchor hole depth: 40 mm

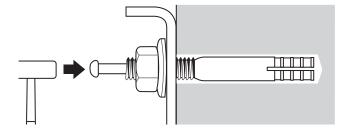


Remove the template sheet, and clean the concrete dust from the holes with a dust pump

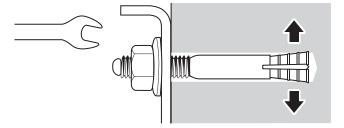


Position the wall plate on the wall and insert M10 x 60 mm commercially available anchors into the holes

Attach the nut and tap it with a hammer until the core touches the top of the anchor.

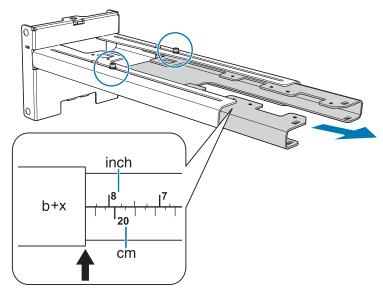


Tighten the nut with a commercially available spanner to secure the wall plate to the wall



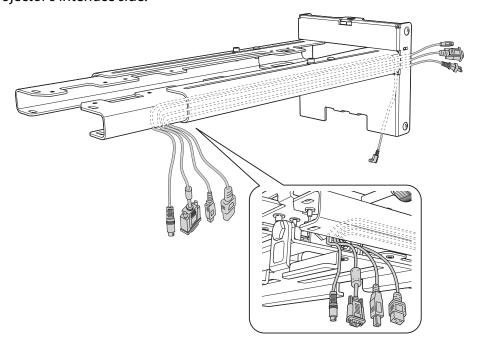
- Determine the projection distance, and then pass the cables through the setting plate
- Check the following values in the projection distance table
  - Numbers on the arm slide scale (b)
  - Distance from surface of screen to wall (x)
  - "Projection Distance Table" p.20

Loosen the M4 x 12 mm bolts (x2) and extend the arm slide on the setting plate Align the slider with the combined distances of (b) and (x) that you checked in step 1.



Route the necessary cables through the setting plate 3

See the following figure to route the cables so that the ends of the cables that connect to the projector are on the projector's interface side.



## **Marning**

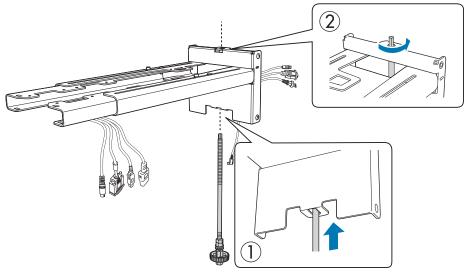
Do not hang the rest of the cable over the setting plate. They could fall and cause an accident.



Route the Touch Unit connection cable through the setting plate. Route the cable so that the end that connects to the Touch Unit appears from the lower part of the setting plate.

## Attaching the setting plate to the wall plate

Insert the hexagonal axis into the setting plate



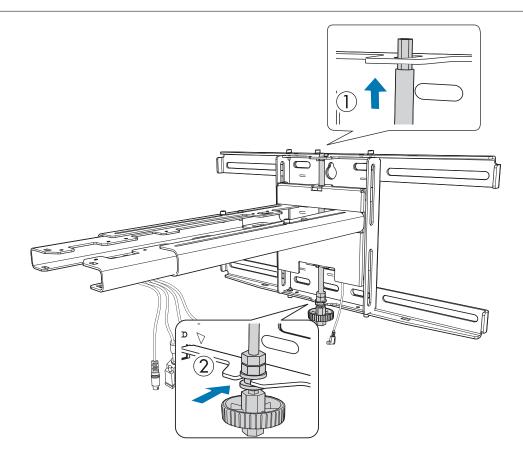
Mount the setting plate to the wall plate

Insert the top of the hexagonal axis into the wall plate, and then insert it into the slot at the bottom.



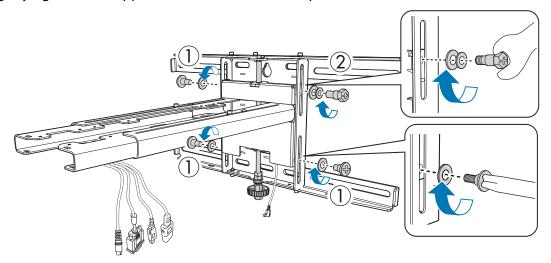
### Caution

- Do not wire the Touch Unit connection cable into the wall. If it is wired into the wall, it cannot be connected to the Touch Unit.
- Take care not to trap the cables between the setting plate and wall plate.



## Secure the setting plate and the wall plate

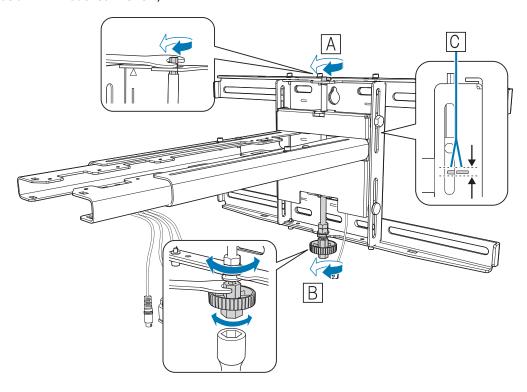
Secure the supplied M6 screws (x3) with a commercially available No.3 cross-head screwdriver, and then lightly tighten the supplied M6 bolt (x1) with the spanner.



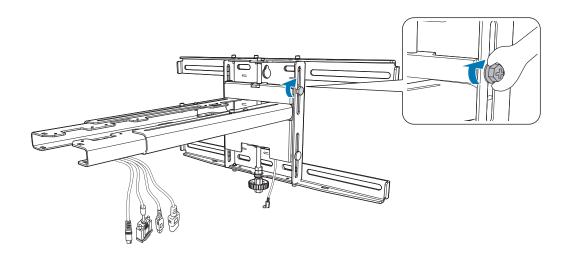


# Adjust the vertical slide with the open-ended spanner, and align it with the standard position ( $\bigcirc$ )

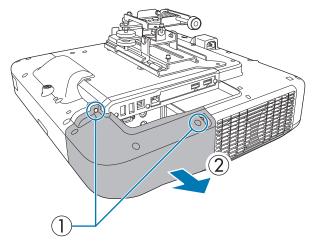
- Tightening the hexagonal axis at the top ( $\boxed{A}$ ) raises the setting plate, and loosening the axis lowers it.
- Tightening the M8 bolt at the bottom ( B ) lowers the setting plate, and loosening the bolt raises it. (You can also use a 17 mm socket wrench.)



## Tighten the M6 bolt (x1) to fix the setting plate in position

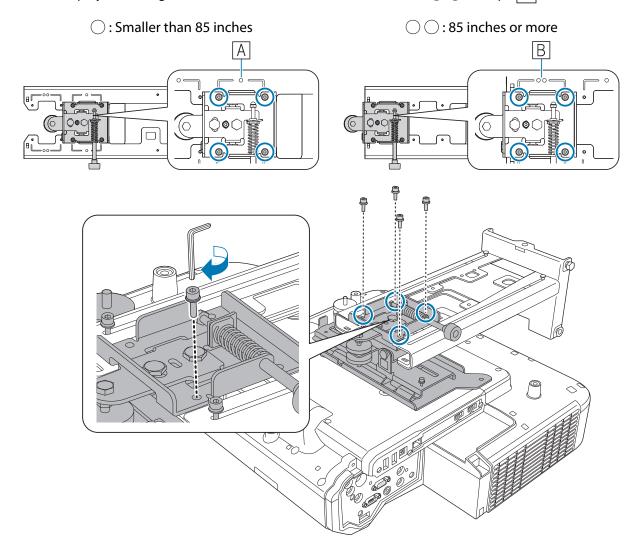


- Securing the projector to the setting plate
- Loosen the screws (x2) and remove the cable cover from the projector



## Attach the 3-axis adjustment unit to the setting plate with the M4 x 12 mm bolts (x4) supplied

- When a projected image is smaller than 85 inches: Mount the unit at the  $\bigcirc$  stamp ( $\boxed{\mathbb{A}}$ ).
- When a projected image is 85 inches or more: Mount the unit at the  $\bigcirc\bigcirc$  stamp ( $\boxed{\mathsf{B}}$ ).

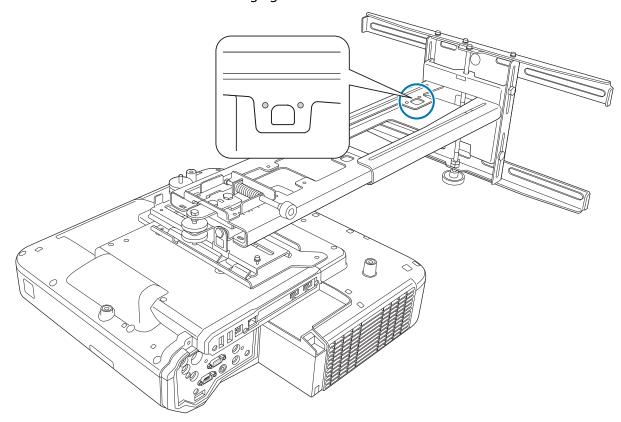


#### Connect the cables to the projector

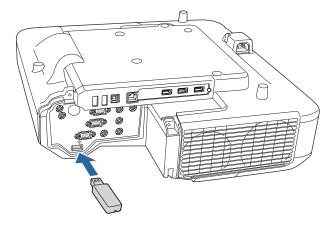
"Connecting Devices" p.28

Connect the power cord last.

Use commercially available M4 screws to secure peripheral devices and accessories such as external tuners to the screw holes in the following figure.



Install the optional wireless LAN module in the wireless LAN unit module slot.



## Adjusting the Position of the Projector

- Do not make adjustments using the projector's Keystone function. Doing so may result in a reduction in image quality.
- When setting up multiple projectors using the batch setup function, perform the batch setup before adjusting the projected image.
  - "Batch Setup Function" p.101



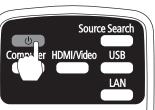
When installing the Touch Unit, if there are any obstacles at the bottom of the whiteboard such as a frame or trays, stick the infrared deflectors along the bottom edge of the whiteboard before adjusting the projector.

"Sticking the infrared deflectors" p.47

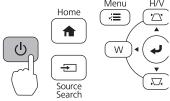
1

#### Press the [Power] button on the remote control or the control panel to turn on the projector

Using the Remote Control







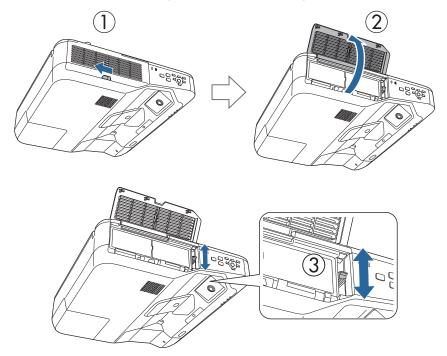


#### Caution

While projecting, do not put your face or hands near the air exhaust vent, and do not place objects that may become warped or damaged by heat near the vent. Hot air from the air exhaust vent could cause burns, warping, or accidents to occur.

2

#### Open the air filter cover, and then adjust the focus using the focus lever



Fine-tune the focus later.

After you finish making adjustments, close the air filter cover.



- You can change the display language from **Language** on the **Extended** menu.
  - Projector's *User's Guide* Projector menu
- When you turn on the projector for the first time, the message "Do you want to set the time?" is displayed. If you set it later, select No.

Change the aspect ratio of the projected image (only when necessary)

Project images from a connected device, and then press the [Aspect] button on the remote control. Each time you press the button, the aspect name is displayed on the screen and the aspect ratio changes.

#### Using the Remote Control





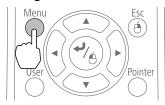
- For details on connecting to devices and projecting images, see the Quick Start Guide.
- The aspect ratio does not change when no images are being projected from the connected device.
- You can also change the aspect ratio from **Aspect** from the **Signal** menu.
- Projector's *User's Guide* Projector menu

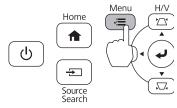
4

Press the projector's [Menu] button.

Using the Remote Control



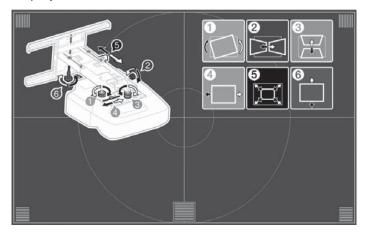






## Select Installation Guide from Settings

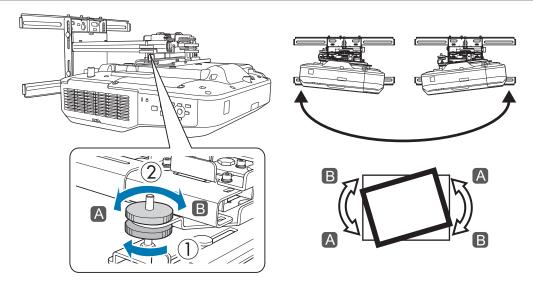
The guidance screen is displayed.



After loosening the adjustment dial at the bottom, adjust the horizontal roll using the adjustment dial at the top.



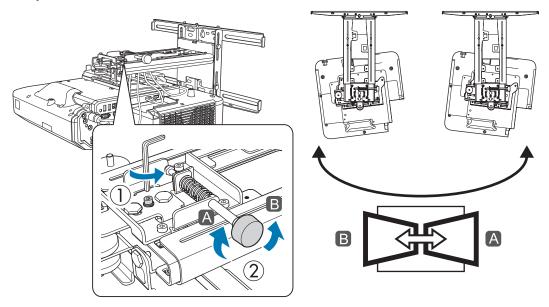
Repeat steps 6 to 11 as necessary.



After you finish making adjustments, tighten the adjustment dial at the bottom.

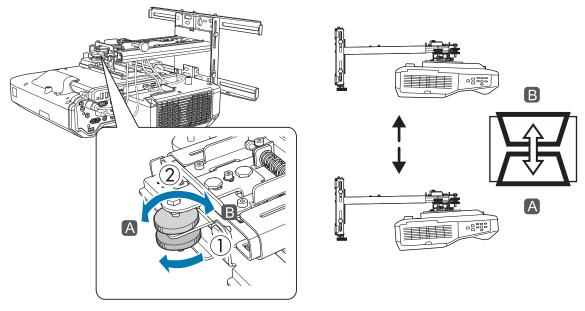
7

Loosen the M4 screw (x1) with the hexagon wrench, and then adjust the horizontal rotation with the adjustment dial



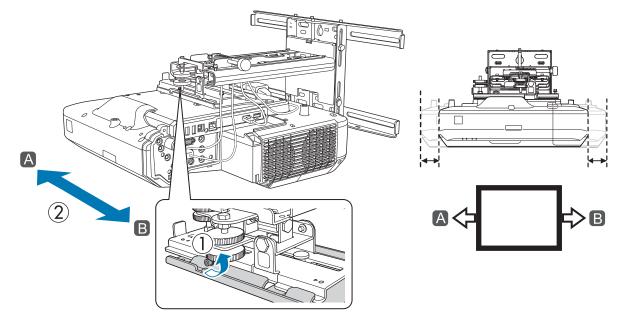
After you finish making adjustments, tighten the M4 screws that you loosened.

After loosening the adjustment dial at the bottom, adjust the vertical tilt using the adjustment dial at the top.



After you finish making adjustments, tighten the adjustment dial at the bottom.

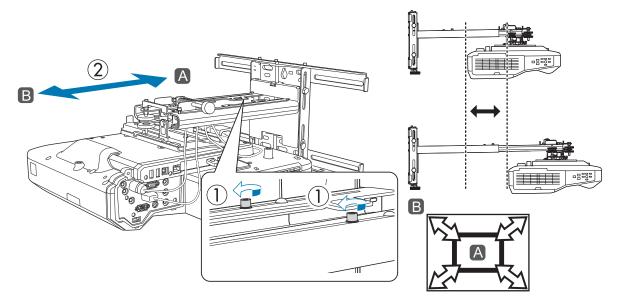
Loosen the M4 bolt with the hexagon wrench, and then adjust the horizontal slide



After you finish making adjustments, tighten the M4 bolt that you loosened.



Loosen the M4 bolts (x2) with the hexagon wrench, and then adjust the forward/backward slide

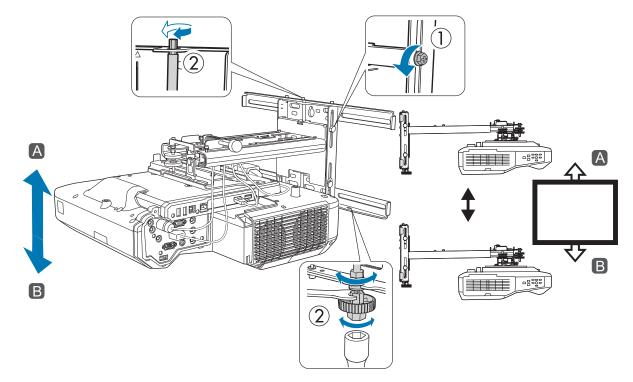


After you finish making adjustments, tighten the M4 bolts that you loosened.



Loosen the M6 bolt (x1) with the open-ended spanner, and then adjust the vertical slide Adjust the vertical slide with the hexagonal axis at the top or the bottom.

- Tightening the hexagonal axis at the top raises the setting plate, and loosening the axis lowers it.
- Tightening the M8 bolt at the bottom lowers the setting plate, and loosening the bolt raises it. (You can also use a 17 mm socket wrench.)



After you finish making adjustments, tighten the M6 bolt that you loosened.



Make sure that all of the bolts that you loosened in steps 6 to 11 are securely tightened



#### 🔼 Warning

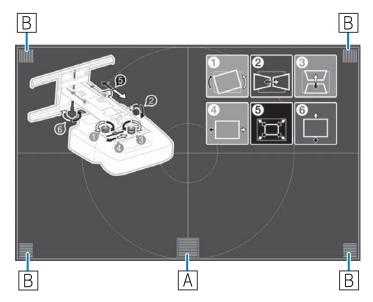
Tighten all bolts and screws firmly. Otherwise, the product may fall and cause personal injury or property damage.



Adjust the focus to match the focus in the following figure ( $\boxed{\mathbb{A}}$ )

Open the air filter cover, and then adjust the focus.

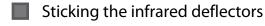
When (A) is in focus, check the B areas. If any of the B areas are out of focus, adjust the focus until the B areas are uniform.



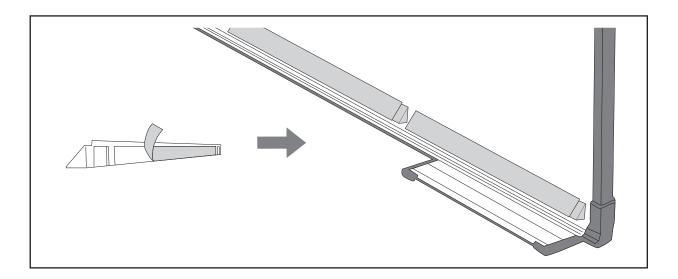
After you finish making adjustments, close the air filter cover.



Press the [Esc] button on the remote control or the control panel to remove the guidance screen



When installing the Touch Unit, if there are any obstacles at the bottom of the whiteboard such as a frame or trays, touch operations will not operate correctly. If there are any obstacles, stick the infrared deflectors along the bottom edge of the whiteboard before adjusting the position of the projector.





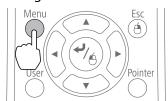
- Do not remove an infrared deflector once it has been stuck in place. This can weaken the adhesive strength of the tape.
- Do not stick tape or place anything on the infrared deflectors. The infrared deflector will not function correctly.

#### Arc Correction

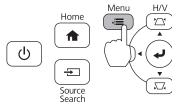
When fine-tuning the shape of the projected image, perform Arc Correction.

Turn on the projector, and then press the [Menu] button

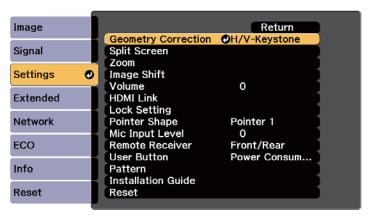
Using the Remote Control



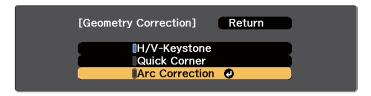
Using the Control Panel



Select Geometry Correction from Settings

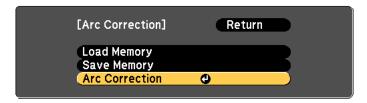


#### Select Arc Correction

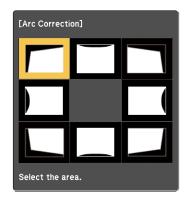


4

#### **Select Arc Correction**

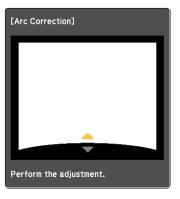


Select the side you want to correct



Correct the selected side

If the message **"Cannot adjust any further."** is displayed while adjusting, you cannot adjust the shape any further in the direction indicated by the gray triangle.



7

Repeat steps 5 and 6 as needed to adjust any remaining sides

## Calibrating the pen

Check that adjusting the position of the projector is complete before you start calibrating the interactive pen.

"Adjusting the Position of the Projector" p.41

There are two methods available for calibrating the pen; **Auto Calibration** and **Manual Calibration**. When calibrating the pen for the first time after installing the projector, perform **Manual Calibration** for optimum calibration.

For the Auto Calibration method, see the projector's User's Guide (on the Document CD-ROM).



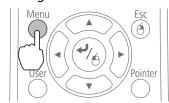
When two projectors are installed in parallel and you are using the interactive function, set the multiprojection interactive features before adjusting the pen.

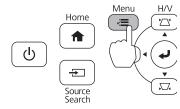
"When two projectors are installed in parallel and you are using the interactive function" p.92

Turn on the projector, and then press the [Menu] button

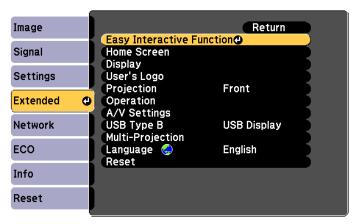
Using the Remote Control



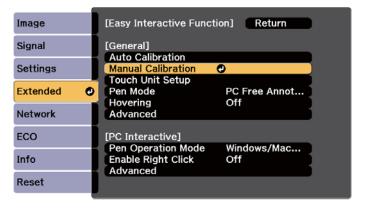




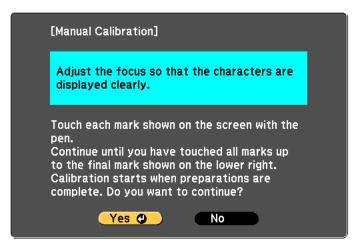
Select Easy Interactive Function from Extended



**Select Manual Calibration** 

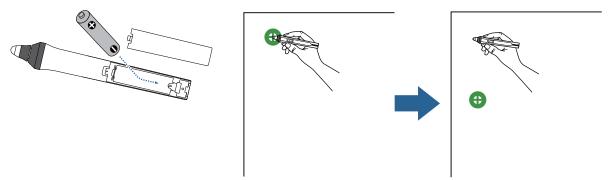


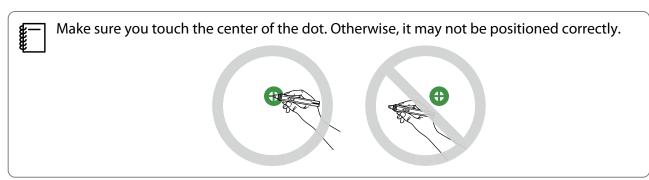
#### Check that the screen is in focus, and then select Yes



A green dot is displayed at the top left of the projection screen.

Touch the center of the dot with the pen tip of the interactive pen The dot disappears and moves to the next position.

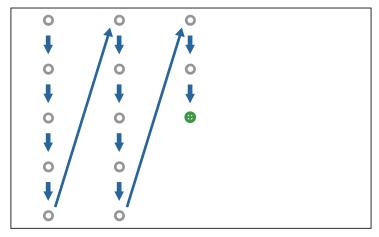






## Repeat step 5 until all of the dots disappear

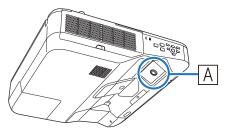
The dot appears at the top left first and then moves towards the bottom right.



When all of the dots disappear, calibration is complete.



 Check that there are no obstacles between the interactive pen and the Interactive pen receiver ( A).



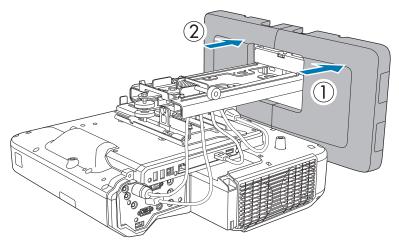
- If you touch the wrong position, press the [Esc] button on the remote control to return to the previous dot.
- To cancel calibration, hold down the [Esc] button for two seconds.

## **Attaching the Covers**

1

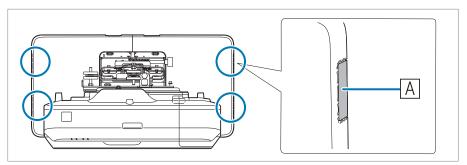
### Attach the wall plate covers

Install the right cover first.





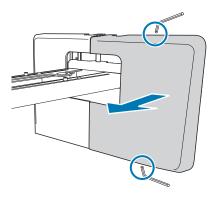
• Depending on the cable configurations, you may need to cut notches ( A ) in the wall plate covers to route the cables. Perform deburring on the cut sides to smooth off any sharp edges.



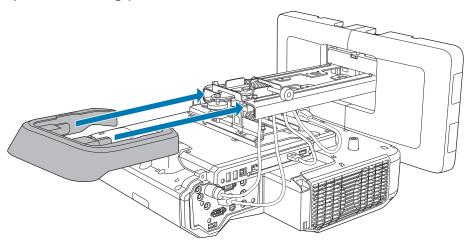
Make sure you do not damage the cables when routing them through the cut holes.

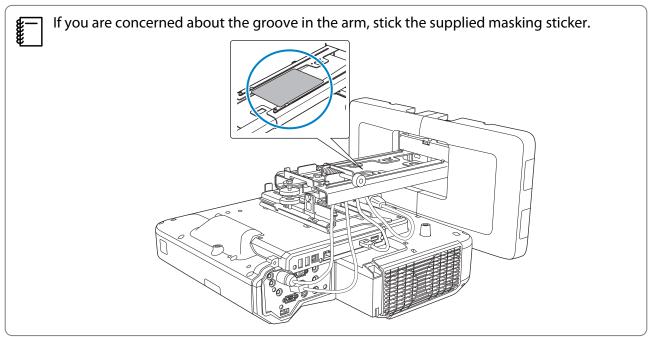
Also, make sure you operate the cutter safely.

• When removing the wall plate cover, press the tabs at the top and bottom of the rear of the wall plate cover with a hexagonal wrench, and pull it forward.



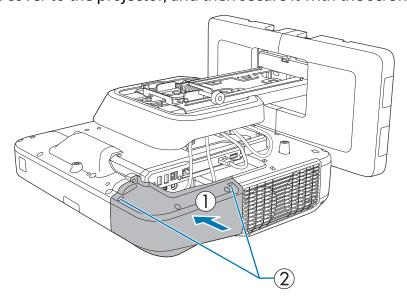
## Fit the end cap to the setting plate





3

## Attach the cable cover to the projector, and then secure it with the screws (x2)





## Caution

Only a specialist should remove or reinstall the projector, including for maintenance and repairs. See the projector's *User's Guide* for instructions on maintenance and repairs.



## 🔼 Warning

- Never loosen the bolts and nuts after installation. Confirm that the screws have not become loose on a regular basis. If you find any loose screws, tighten them firmly. Otherwise, the product may fall and cause personal injury or property damage.
- Do not hang on this product or hang a heavy object on this product. If this product falls, it could cause death or personal injury.



## Installing the Touch Unit

Check that the following procedures have been completed before installing the Touch Unit.

- Installing the Projector ( p.28)
- Adjusting the Position of the Projector ( p.41)
- Calibrating the Interactive Pen ( p.49)

The procedure differs depending on where the Touch Unit is to be installed.

- When installing the Touch Unit outside the whiteboard (using the Touch Unit Bracket) ( p.56)
- When installing the Touch Unit on the whiteboard (without using the Touch Unit Bracket) ( p.80)

#### When installing the Touch Unit outside the whiteboard (using the Touch Unit Bracket)



#### Installation Procedure

Install the Touch Unit outside the whiteboard using the Touch Unit Bracket and connect it to the projector. Check that the screen is parallel to the surface on which the Touch Unit is installed.



#### Caution

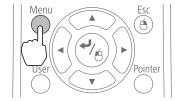
Only connect the Touch Unit to the EB-696Ui. Do not connect it to any other projectors or devices.

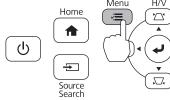
1

#### Turn on the projector, and then press the [Menu] button

Using the Remote Control

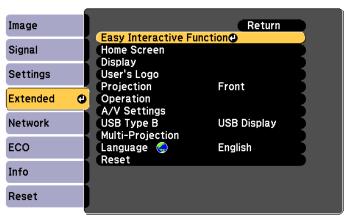




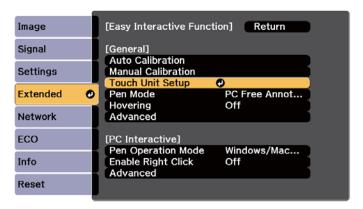


2

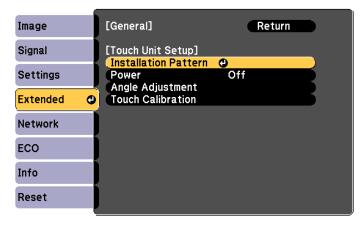
## Select Easy Interactive Function from Extended



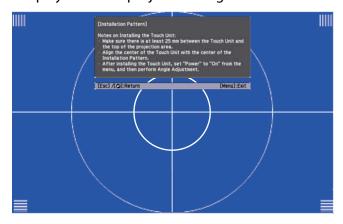
#### Select Touch Unit Setup



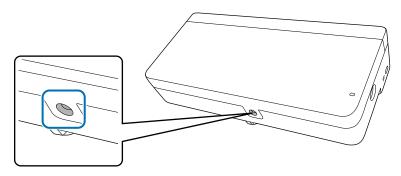
Select Installation Pattern



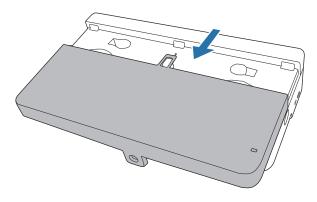
The installation pattern is displayed on the projected image.



Loosen the screw at the bottom of the dial cover using a commercially available No.2 crosshead screwdriver



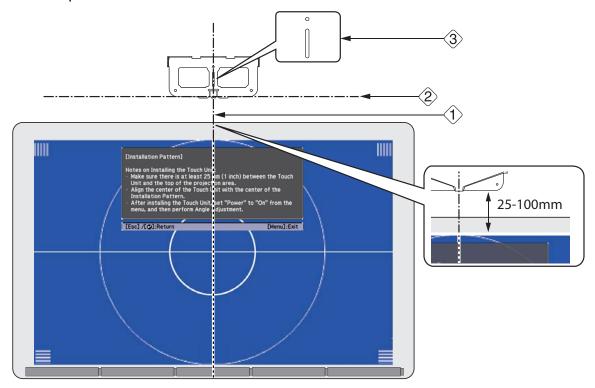
#### Slide the dial cover down to remove it



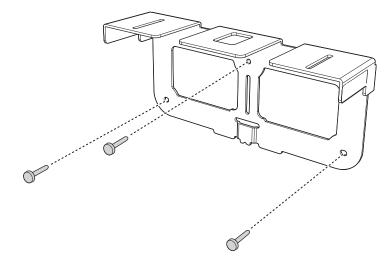
Determine the installation position for the Touch Unit Bracket

We recommend marking the following installation positions (positions of the screw holes) to make installation easier.

- ( 1 ): Center line of installation pattern. Align with the center line ( 3 ) of the installation plate.
- (2): 25 to 100 mm from the top edge (white line) of the projected image. Align with the bottom line of the installation plate.

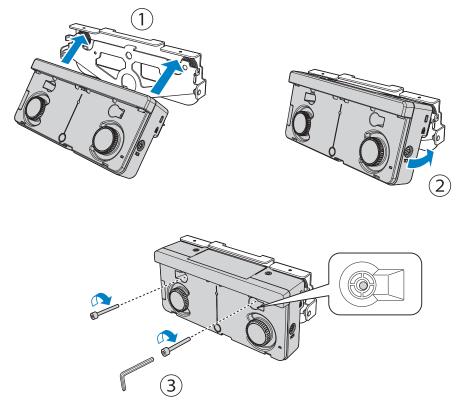


Install the installation plate using three M4 commercially available 4 mm wood screws, or three M4 anchor bolts.



Attach the securing plate to the rear of the Touch Unit with the two M4 x 25 mm bolts supplied

Adjust the position so that the two screw holes of the Touch Unit and the two screw holes of the securing plate are aligned. Tighten the bolts to the securing plate using the supplied hexagon wrench.



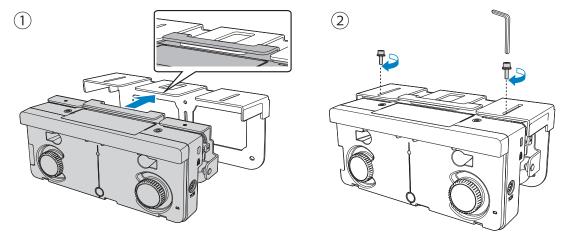


## Caution

There is a powerful magnet on the rear of the Touch Unit. Do not trap your hand between the Touch Unit and the securing plate.

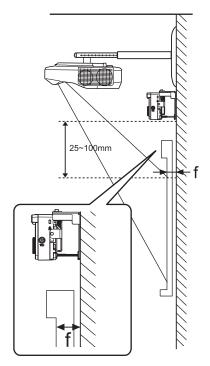


Use the supplied M4 x 10mm bolts (x2) to install the securing plate on the installation plate Tighten the bolts to the securing plate using the supplied hexagon wrench.





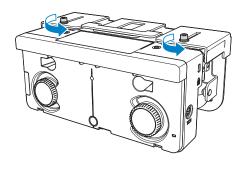
#### Measure the distance from the wall to the surface of the screen (f)

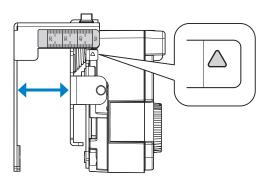




## Adjust the height of the left and right according to the value (f) measured in step 11

Loosen the two screws and move the Touch Unit back and forth to adjust the left and right so that the arrow aligns with the value on the scale the same as (f). When you have finished adjusting, tighten the two screws.





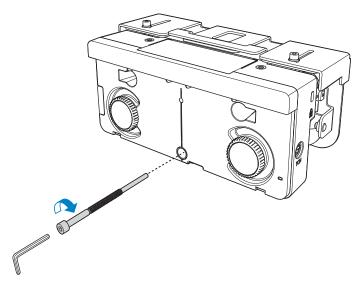


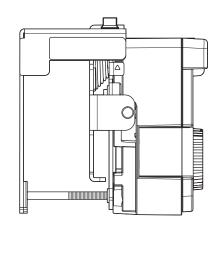
#### Secure the Touch Unit and the installation plate with the hexagon socket head cap bolt

The bolt used varies according to the distance (f) from the wall to the surface of the screen measured in step 11. Tighten the bolt to the installation plate using the supplied hexagon wrench.

When (f) = 20 to 35 mm: M4 x 55 mm bolt

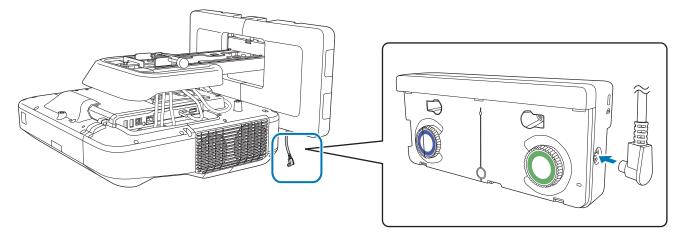
When (f) = 35 to 50 mm: M4 x 70 mm bolt





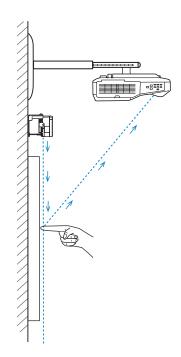
14

## Connect the Touch Unit connection cable that is connected to the projector to the TCH port on the Touch Unit

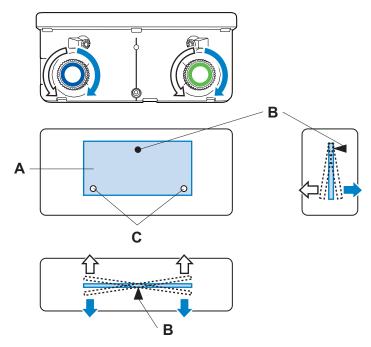


## Angle Adjustment

An infrared laser in the shape of a curtain is emitted from the Touch Unit. The infrared laser reflects off your finger when touched to the whiteboard thereby detecting the finger position allowing the projector's infrared camera to recognize the position being reflected.



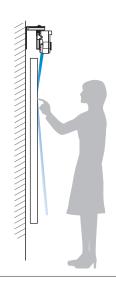
Adjust the angle of the laser light coming from the Touch Unit so that the projector can correctly detect the position of your finger.

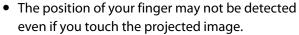


- A: Infrared laser emission unit
- B: Fulcrum
- C: Vertical movable point

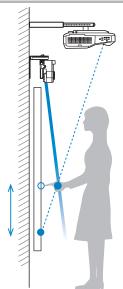
If the laser is not emitted parallel to the screen, the projector will not detect touch operations or the position of your finger correctly.

#### When the laser is not parallel to the screen





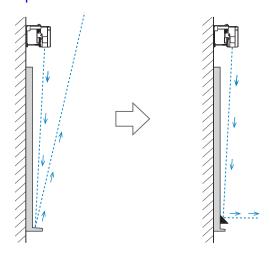
• Even if you do not touch the projected image, touch operations may be incorrectly detected and unintended operations may be performed.



- The position of your finger detected by the projector and your actual finger position may not align, and an unintended operation may be performed
- The projector enters a state in which a touch is still being detected, and a click operation is not recognized.

If there are any obstacles at the bottom of the whiteboard such as a frame or trays, the laser will be reflected and the location of your finger will not be detected correctly. Stick infrared deflectors on the frame and the trays to prevent them from reflecting the laser.

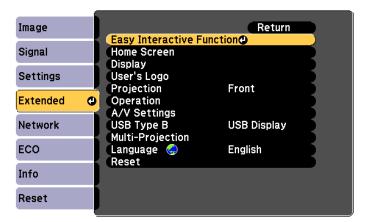
"Sticking the infrared deflectors" p.47





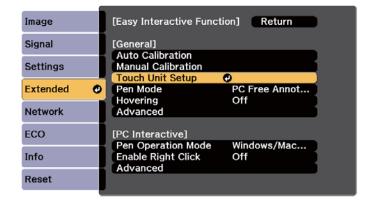
- When two projectors are installed in parallel and you want to use the interactive function, set the multiprojection interactive features in advance.
  - "When two projectors are installed in parallel and you are using the interactive function" p.92
- Before adjusting the angle, make sure that interactive pen calibration is complete.
  - "Calibrating the pen" p.49

## Select Easy Interactive Function from the projector's Extended menu

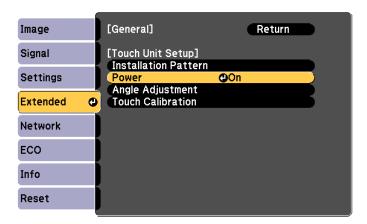


2

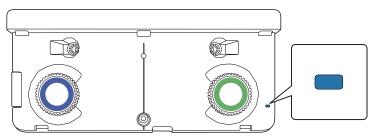
## Select Touch Unit Setup



#### Set **Power** to **On**



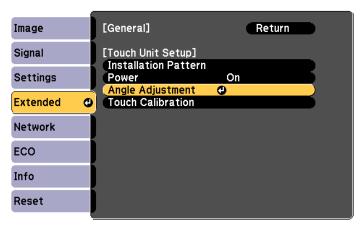
The Touch Unit power turns on and the indicator is lit blue.



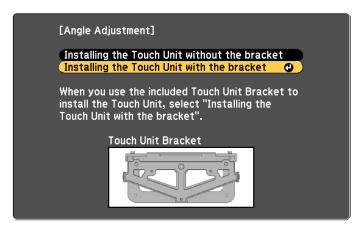
When **Power** is set to  $\mathbf{On}$ , the next time the projector is turned on, the Touch Unit automatically turns on.

4

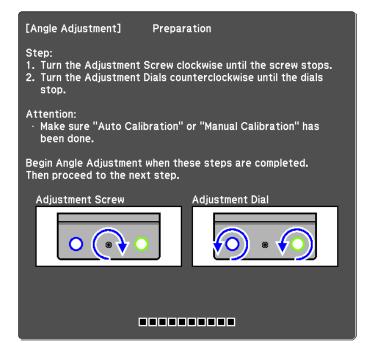
## Select **Angle Adjustment**



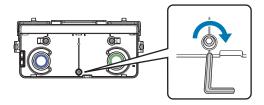
#### Select Installing the Touch Unit with the bracket



The following screen is displayed.

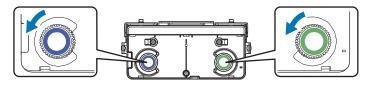


Turn the adjustment screw for the Touch Unit fully clockwise using the hexagon wrench supplied with the setting plate

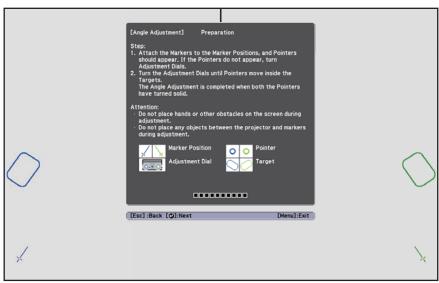




Turn the adjustment dials on the Touch Unit counterclockwise until you hear a clicking sound



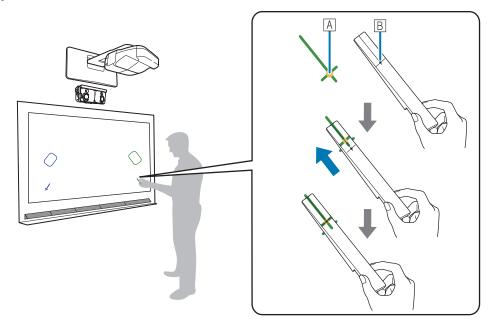
When you hear a clicking sound coming from the adjustment dial, stop turning, and then press the [ ✔] button on the remote control. The following screen is displayed.



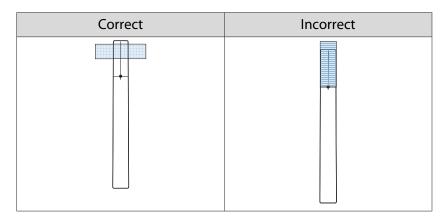


Attach the supplied two markers to the marker positions ( ) ( ) on the projection screen

Match the positions so that the crosses ( $\boxed{\mathbb{B}}$ ) for the markers overlap with the points ( $\boxed{\mathbb{A}}$ ) for the ( $\checkmark$ ).



- Magnetic screens: Place the bottom of the markers onto the screen.
- Non-magnetic screens: Use the supplied tape to secure the markers. Attach the tape so that the either end of marker does not come loose off the screen.





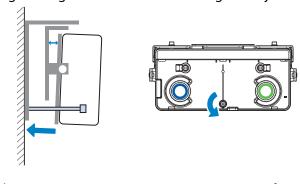
Do not place anything other than the markers near the projected image during angle adjustment. If other objects are on the projected image, angle adjustment may not be performed correctly.

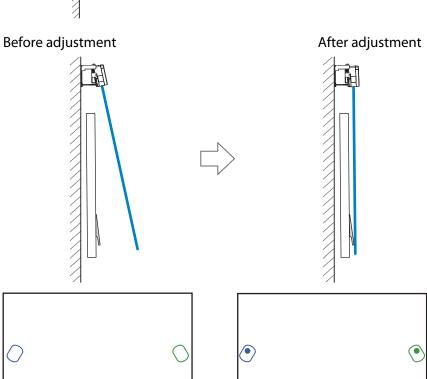


Turn the adjustment screw on the Touch Unit counterclockwise to display the pointers



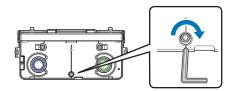
Adjusting the angle of the Touch Unit using the adjustment screw

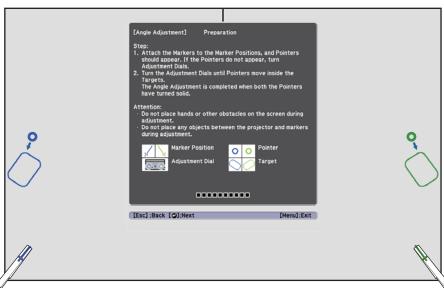




When the pointers overlap in the correct position, the colors become solid ( ) ( ).

Turn the adjustment screw clockwise to move the pointer down as needed.



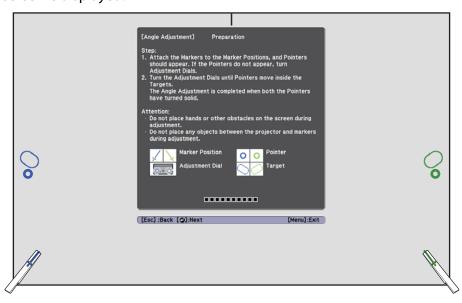




10

- When turning the adjustment screw, make sure shadows from your arm or body do not overlap with the markers.
- If the pointers are not solid colors ( ) ( ), check if the Touch Unit and screen are parallel. Adjust the Touch Unit Bracket so that the Touch Unit and screen are parallel.

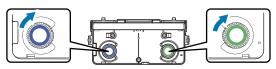
The following screen is displayed.

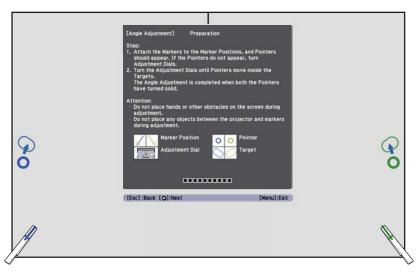




Turn the adjustment dials on the Touch Unit to move the pointers  $\bigcirc$   $\bigcirc$   $\bigcirc$  so that they overlap with the target  $\bigcirc$   $\bigcirc$  of the same color on either side

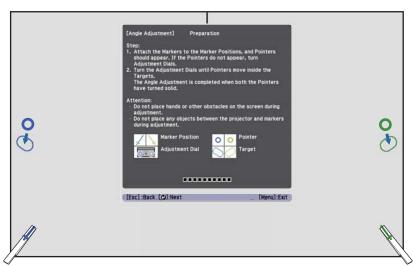
When you turn the adjustment dial clockwise, the pointer moves diagonally up towards the center of the projected image.





When you turn the adjustment dial counterclockwise, the pointer moves diagonally down away from the center of the projected image.



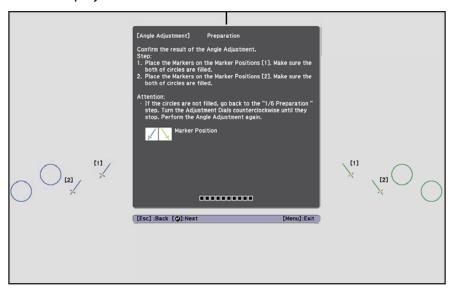


When the pointers overlap in the correct position, the colors become solid ( ) ( )



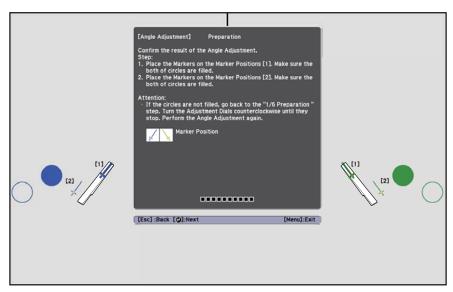
- If you hear a clicking sound from the dial, the pointer does not move any further.
- When turning the dials, make sure shadows from your arm or body do not overlap with the markers.

The following screen is displayed.



Place the markers at the top marker positions [1] ( ) ( )

When angle adjustment is performed correctly, the upper pointers become solid colors ( ) ( ).

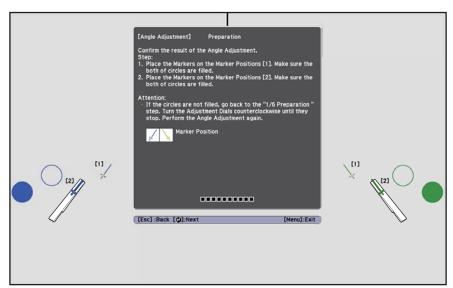


If the upper pointers do not become solid colors ( ) ( ), start again from step 1.



# Place the markers at the bottom marker positions [2] ( ) ( )

When angle adjustment is performed correctly, the bottom pointers become solid colors ( ) ( ).



If the bottom pointers do not become solid colors ( ), start again from step 4.

15

When you have finished checking, remove the markers, and then press the [ ✔] button on the remote control

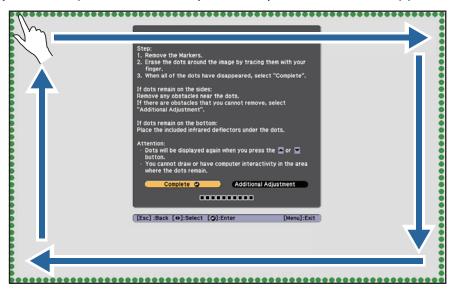
The following screen is displayed.





# Trace the dots ( ) with your finger

When angle adjustment is performed correctly, the dots you have traced disappear.

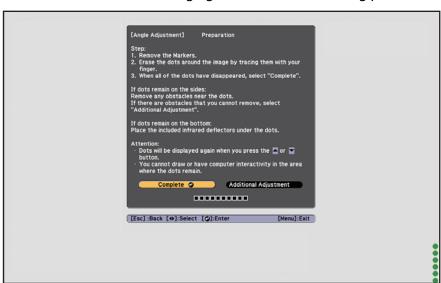




Touch operations may not perform correctly if you are wearing artificial nails or nail polish, or if your fingers are obstructed by bandages and so on.

When all of the dots have disappeared, select **Complete** and press the [ → ] button on the remote control. Then, go to step 17.

If some dots remain as shown in the following figure, check the following points.

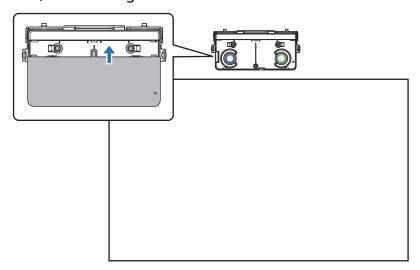


If the dots on the left and right do not disappear: Remove any obstacles that are on the left and right of the projection screen. After removing any obstacles, press the [ ] or [ ] button on the remote control, and then perform step 16 again. Perform additional adjustment if dots still remain even after performing this step, or if there are obstacles that cannot be removed such as whiteboard trays or frames.

"Additional adjustments" p.75



Attach the dial cover, and then tighten the screw at the bottom of the dial cover



When you have finished making adjustments, perform a touch calibration.

"Touch Calibration" p.77

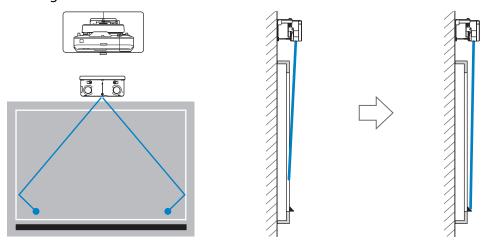


Make sure you store the markers in a safe place.

#### Additional adjustments

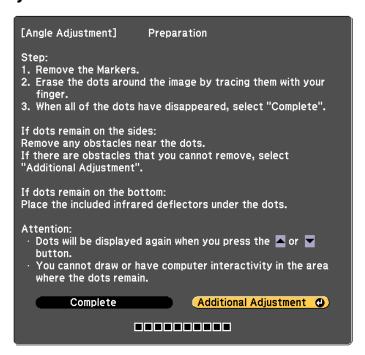
Perform additional adjustments if the dots on the left and right remain after adjusting the angle.

If the laser crosses the frame of the screen, it reflects within the screen and touch operations cannot be performed correctly. Additional adjustments adjust the height of the laser beam so that it does not cross the frame on the left and right.

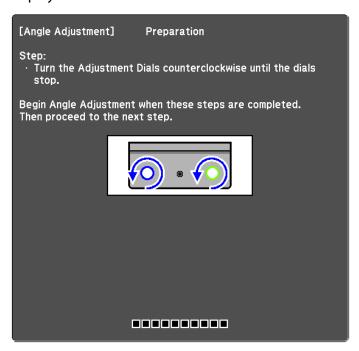




#### **Select Additional Adjustment**



The following screen is displayed.



After this, adjust using the same procedure for angle adjustment from step 11. Follow the on-screen instructions to make adjustments.

"Angle Adjustment" p.61

When you have finished making adjustments, perform a touch calibration.

"Touch Calibration" p.77



Make sure you store the markers in a safe place.

# ■ Touch Calibration

Perform touch calibration so that the projector can recognize touch operations precisely.



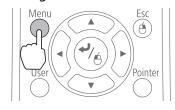
When two projectors are installed in parallel and you are using the interactive function, check the following before performing touch calibration.

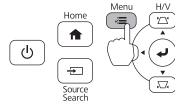
- The multi-projection interactive features are set
  - "When two projectors are installed in parallel and you are using the interactive function" p.92
- Both projectors and the Touch Unit are turned on

# Press the projector's [Menu] button

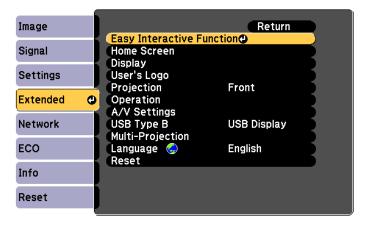
Using the Remote Control



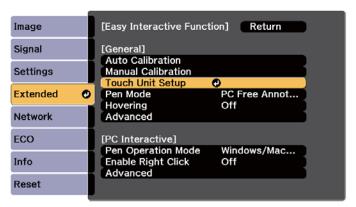




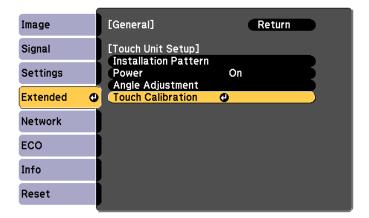
Select Easy Interactive Function from Extended



Select Touch Unit Setup



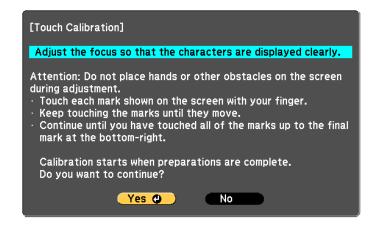
#### **Select Touch Calibration**



The focus adjustment message is displayed.

5

## Check that the screen is in focus, and then select Yes

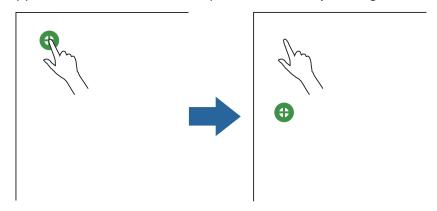


A dot is displayed at the top left of the projection screen.



### Touch the center of the dot with your finger

When the dot disappears and moves to the next position, remove your finger.





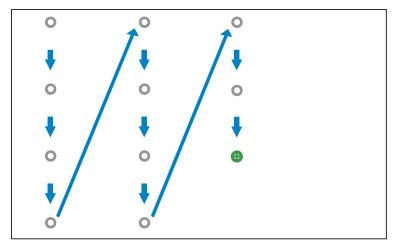
• Make sure you touch the center of the dot. Otherwise, it may not be positioned correctly.



• Do not touch with anything else except the tip of your finger.

7

## Repeat step 6 until all of the dots disappear



When all of the dots disappear, touch calibration is complete.



- If you touch the wrong position, press the [Esc] button on the remote control or control panel. This returns you to the previous dot. You cannot go back by two dots.
- To cancel touch calibration, hold down the [Esc] button for two seconds.
- It may take several seconds after all of the dots have disappeared until touch calibration is complete.

# When installing the Touch Unit on the whiteboard (without using the Touch Unit Bracket)

#### About installation

- There are magnets built into the back of the Touch Unit. Normally, the Touch Unit should be installed by attaching the magnets to the screen.
- If the magnets cannot be attached to a screen, use commercially available M4 screws (x3).
- Attach the Touch Unit to the same level surface as the screen surface.

### Installation Procedure

Install the Touch Unit, and then connect to the projector.

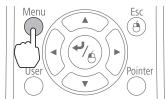


#### Caution

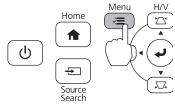
Only connect the Touch Unit to the EB-696Ui. Do not connect it to any other projectors or devices.

Turn on the projector, and then press the [Menu] button

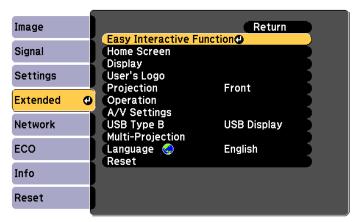
Using the Remote Control



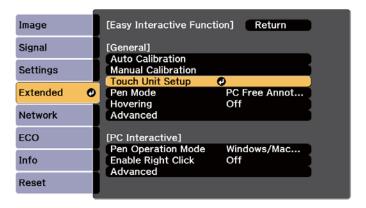
Using the Control Panel



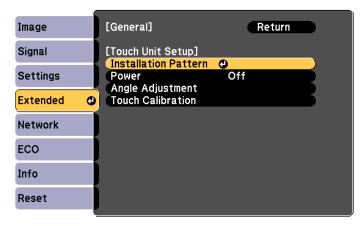
Select Easy Interactive Function from Extended



### Select Touch Unit Setup



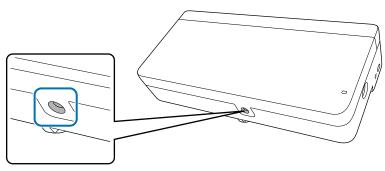
Select Installation Pattern



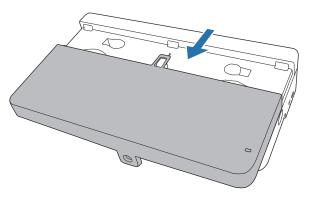
The installation pattern is displayed on the projected image.



Loosen the screw at the bottom of the dial cover using a commercially available No.2 cross-head screwdriver



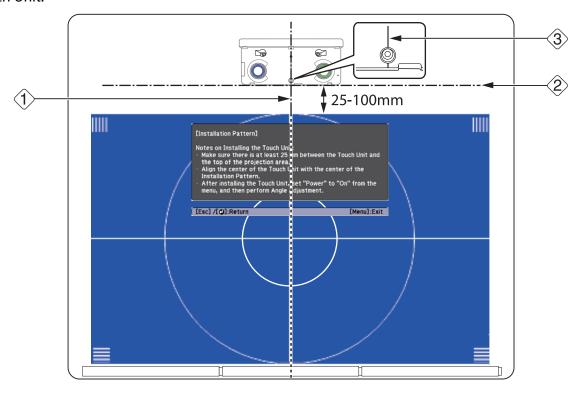
# Slide the dial cover down to remove it



Determine the installation position for the Touch Unit

We recommend marking the following installation positions to make installation easier.

- ( $\langle 1 \rangle$ ): Center line of installation pattern. Align with the center line of the Touch Unit ( $\langle 3 \rangle$ ).
- (  $\bigcirc$  ): 25 to 100 mm from the top edge of the projected image. Align with the bottom edge of the Touch Unit.





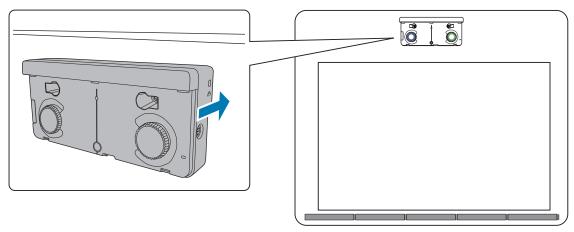
#### Secure the Touch Unit

• Magnetic screens: Place the back of the Touch Unit on the screen surface, and then secure.

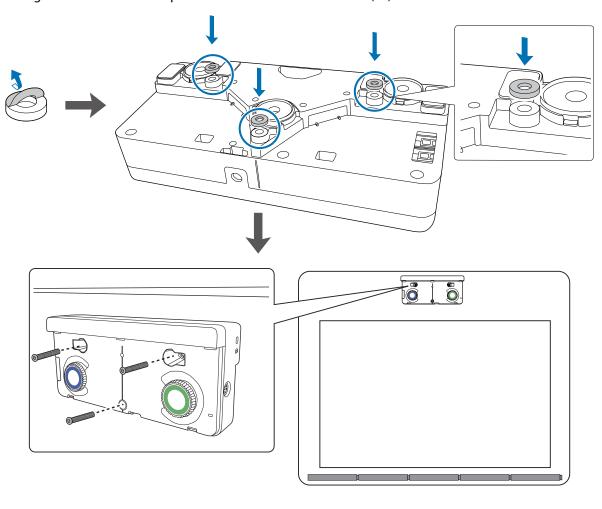


# Caution

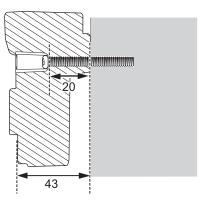
When installing the Touch Unit on a magnetic surface, be careful not to trap your fingers or any other part of your body between the magnets and the installation surface. Powerful magnets are used which can cause injury if you trap your fingers.



• Non-magnetic screens: Attach spacers and secure with M4 screws (x3).

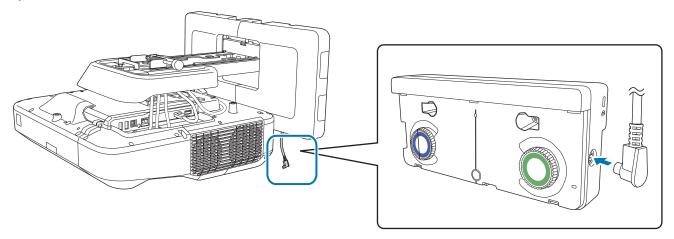


[Unit: mm]



Screw hole cross-section

Connect the Touch Unit connection cable that is connected to the projector to the TCH port on the Touch Unit



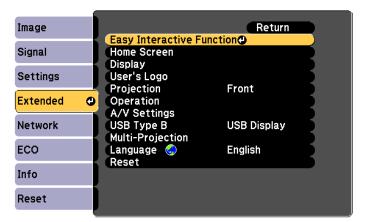
# Angle Adjustment

This section explains how to adjust the angle of the Touch Unit. For details on angle adjustment, see p.61.



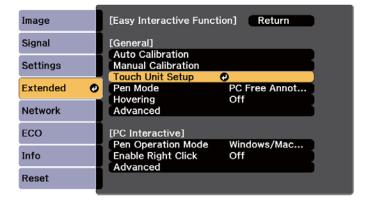
- When two projectors are installed in parallel and you want to use the interactive function, set the multiprojection interactive features in advance.
  - "Multi-Projection settings" p.88
- Before adjusting the angle, make sure that interactive pen calibration is complete.
  - "Calibrating the pen" p.49

# Select Easy Interactive Function from the projector's Extended menu

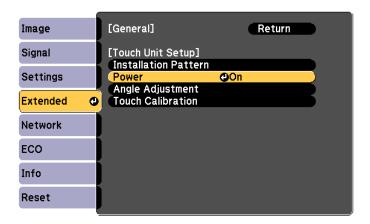


2

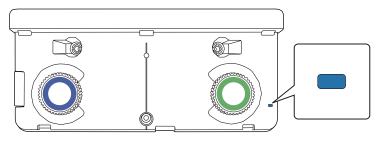
#### Select Touch Unit Setup



#### Set **Power** to **On**



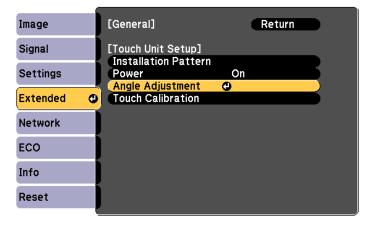
The Touch Unit power turns on and the indicator is lit blue.



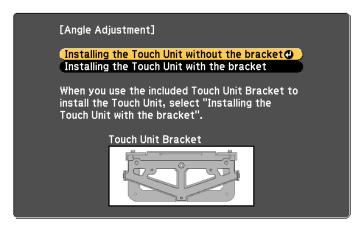
When **Power** is set to **On**, the next time the projector is turned on, the Touch Unit automatically turns on.

4

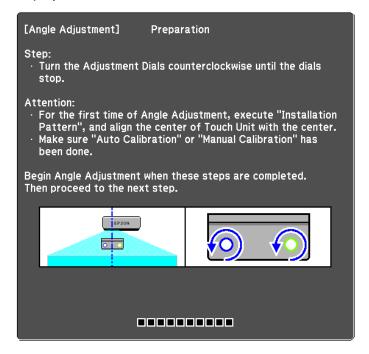
## Select **Angle Adjustment**



#### Select Installing the Touch Unit without the bracket

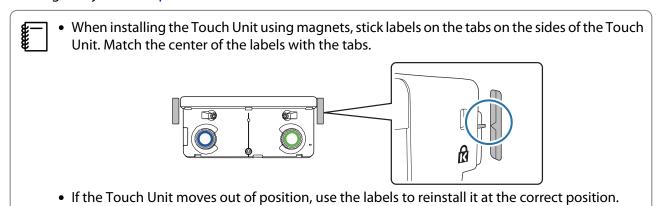


The following screen is displayed.



The next procedures are the same as for adjusting the angle (after step 11) when installing outside the whiteboard using the bracket.

"Angle Adjustment" p.61



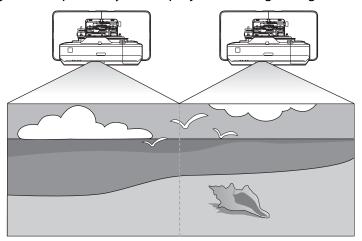
When you have finished making adjustments, perform a touch calibration.

"Touch Calibration" p.77



# Installing Multiple Projectors in Parallel (Multi-Projection)

By installing multiple projectors in parallel, you can project one, large image (Multi-Projection).



Check the following when installing multiple projectors in parallel. (☞"Installation Work Flow" p.10)



When projecting the screen from one computer, you need to make the following preparations. See the documentation provided with your computer to check how to make settings.

- Connect a cable from one computer to each projector (the computer needs two image output ports)
- Set to output images to multiple screens from one computer

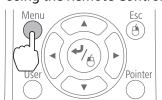
## Multi-Projection settings

Follow the steps below when using the Multi-Projection function.

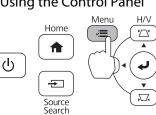
- Setting the Projector ID ( p.88)
- 2 Adjusting the Image in Multi-Projection ( p.91)
- Setting the Projector ID

# Turn on the projector, and then press the [Menu] button

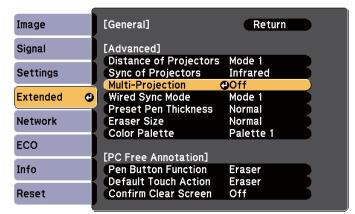
Using the Remote Control



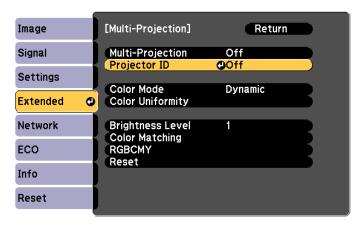
Using the Control Panel



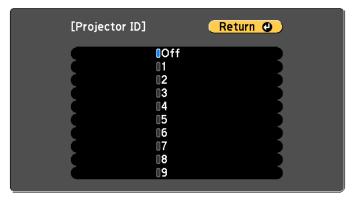
Select Multi-Projection from Extended



Select **Projector ID** 

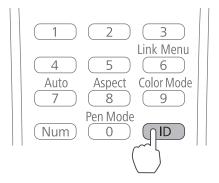


Select the ID number for the target projector

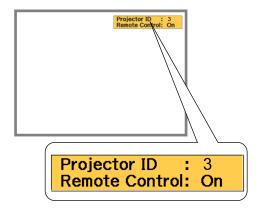


Press the [Menu] button to close the menu Repeat steps 1 to 5 for the remaining projectors.

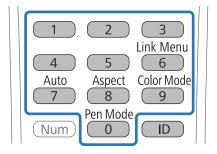
Point the remote control at the projector you want to operate, and then press the [ID] button



The ID set for the projector is displayed on the projected screen. The display turns off after approximately three seconds.



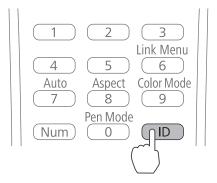
While holding down the [ID] button, press the button with the same number as the projector ID for the projector you want to operate



Remote control operations for the projector with the selected ID are enabled.



#### Press the [ID] button and check the ID setting



The following is displayed.

- Remote Control: On is displayed: You can operate the projector currently being operated.
- Remote Control: Off is displayed: You cannot operate the projector with the remote control. Repeat the procedure above to enable remote control operations.



- Each time the projector is turned on, you need to select the projector ID for the projector you want to operate. When the projector is turned on, the ID set for the remote control is 0.
- When **Projector ID** is set to **Off**, you can operate the projector using the remote control regardless of the ID setting selected using the remote control.
- When the remote control ID is set to 0, you can operate all of the projectors regardless of the projector ID setting.

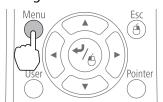
# Adjusting the Image in Multi-Projection

- Check that projector position adjustment is complete
  - "Adjusting the Position of the Projector" p.41
- If you are concerned about the alignment between images being projected in multi-projection, try performing Arc Correction.
  - "Arc Correction" p.48

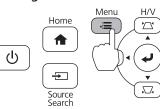
# 1

# Turn on the projector, and then press the [Menu] button

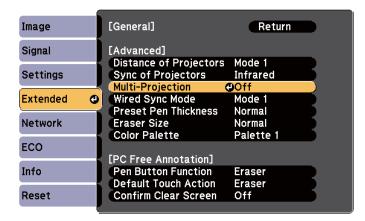
#### Using the Remote Control



# Using the Control Panel

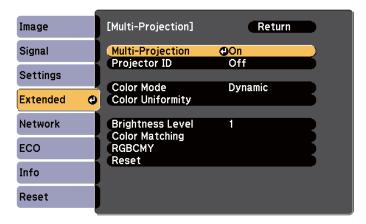


### Select Multi-Projection from Extended



3

#### Set Multi-Projection to On



Press the [Esc] button to return to the previous screen.

4

#### Make each setting

**Color Mode** Set the same item for each projector.

**Color Uniformity** Adjust the color balance for the entire screen (only when necessary).

**Brightness Level** If the brightness for each lamp is different, adjust the lamp brightness from level 1 to 5. Adjust the darkest lamp as the standard. This is only

available when  $\bf Power\ Consumption$  is set to  $\bf Normal\ from\ the\ ECO$ 

menu.

**Color Matching** Adjust the color and brightness in gradations from all white to all black.

## When two projectors are installed in parallel and you are using the interactive function

When two projectors are installed in parallel and you want to use the interactive function, after adjusting the image for multi-projection, make the following settings. Make the settings for each projector in turn. You cannot set the two projectors at the same time.

- 1 Setting Projector Synchronization ( p.93)
- 2 Setting Multi-Projection Interactive ( p.94)



When two images overlap, the interactive function does not work correctly.

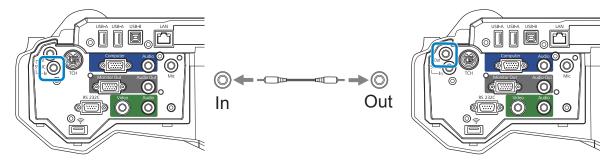
# Setting the projectors in sync

When using the interactive function for multi-projection, interactive pen operations become unstable due to infrared interference. Follow the steps below to stabilize operations for the interactive pen. Check that installation is complete for both projectors before making settings.

- "Installing the Setting Plate" p.28
- Connect the SYNC ports for each projector by using the optional remote control cable set (ELPKC28)

When the projectors are connected by cable, operations for the interactive pen stabilize.

The SYNC port has an IN and OUT socket. When you connect one end of the remote control cable set to an IN socket, connect the other end to an OUT socket.



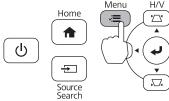
Turn on the projector, and then press the [Menu] button

#### Using the Remote Control

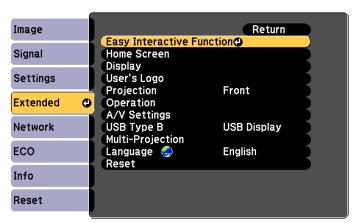
3



## Using the Control Panel

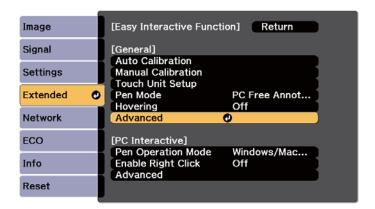


# Select Easy Interactive Function from Extended



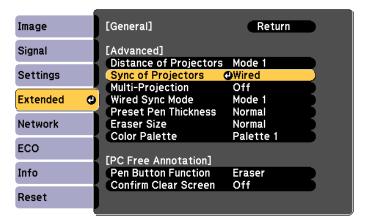


#### Select Advanced



# 5

#### Set Sync of Projectors to Wired



# Setting Multi-Projection Interactive

Before setting Multi-Projection Interactive, check that you have finished adjusting the image for multi-projection. If you perform image adjustment after setting interactive, the pen position may not be correct.

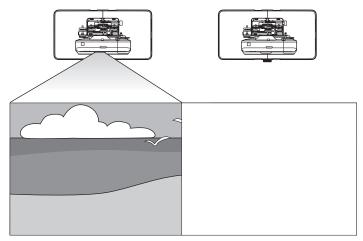
"Adjusting the Image in Multi-Projection" p.91

The procedure differs depending on whether or not the Touch Unit is used.

When not using the Touch Unit



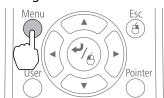
Turn on the projector on the left and turn off the projector on the right



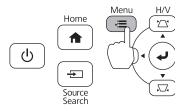
5

Press the [Menu] button

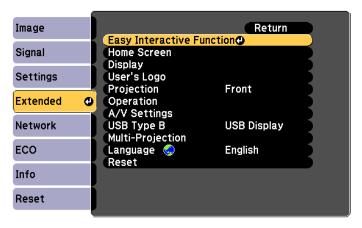
#### Using the Remote Control



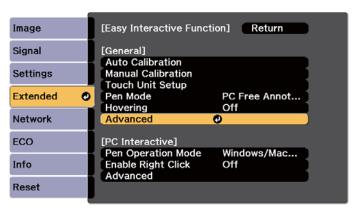
Using the Control Panel



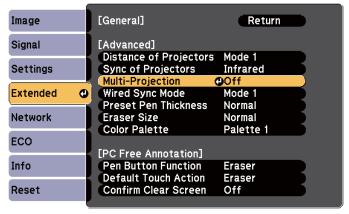
Select Easy Interactive Function from Extended



Select Advanced from General

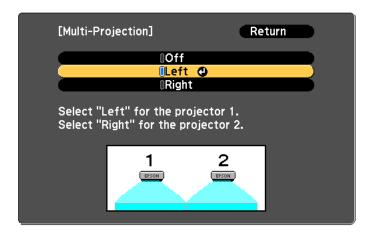


Select Multi-Projection

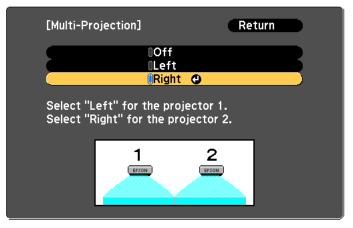


6 Se

#### Select Left



- Calibrate the pen ( p.49)
- Turn off the projector on the left
- Turn on the projector on the right, and perform steps 2 to 5
- Select **Right** from **Multi-Projection**

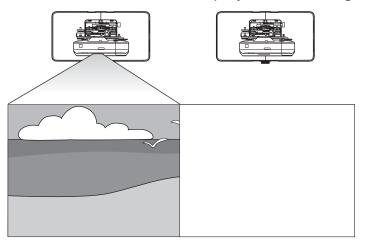


11

Calibrate the pen (p.49)

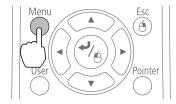
# When using the Touch Unit

Turn on the projector on the left and turn off the projector on the right

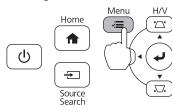


Press the [Menu] button 2

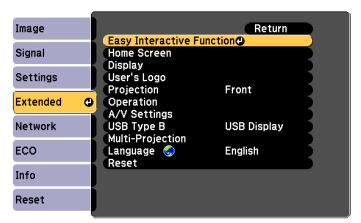
Using the Remote Control



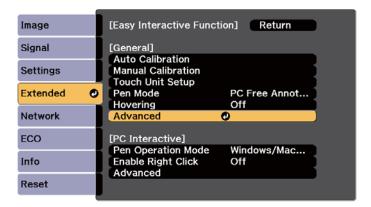
Using the Control Panel



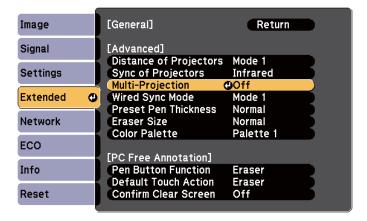
Select Easy Interactive Function from Extended



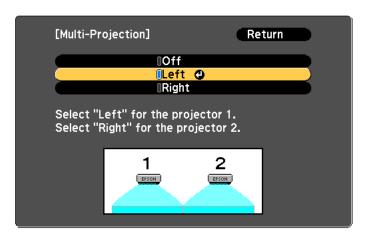
#### Select Advanced from General



5 Select Multi-Projection



Select **Left** 



7

Calibrate the pen (p.49)

### Installing and adjusting the angle for the Touch Unit

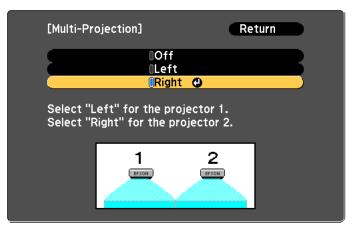
The procedure differs depending on where the Touch Unit is installed.

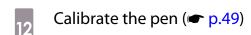
When installing the Touch Unit outside the whiteboard (using the Touch Unit Bracket)

- 1 Installing the Touch Unit ( p.56)
- 2 Adjusting the Angle of Laser Diffusion ( p.61)

When installing the Touch Unit on the whiteboard (without using the Touch Unit Bracket)

- 1 Installing the Touch Unit ( p.80)
- Adjusting the Angle of Laser Diffusion ( p.84)
- Turn off the projector on the left
- Turn on the projector on the right, and perform steps 2 to 5
- Select **Right** from **Multi-Projection**







## Installing and adjusting the angle for the Touch Unit

The procedure differs depending on where the Touch Unit is installed.

- When installing the Touch Unit outside the whiteboard (using the Touch Unit Bracket)
  - Installing the Touch Unit ( p.56)
  - Adjusting the Angle of Laser Diffusion ( p.61)
- When installing the Touch Unit on the whiteboard (without using the Touch Unit Bracket)
  - Installing the Touch Unit ( p.80)
  - Adjusting the Angle of Laser Diffusion ( p.84)
- 14

# Turn on the projectors on the left and right



Performing touch calibration for each projector (p.77)



# **Batch Setup Function**

After making the projector's menu settings for one projector, you can copy the settings to other projectors (batch setup function). The batch setup function is only for projectors with the same model number.

Use one of the following methods.

- Setup using a USB flash drive.
- Setup by connecting the computer and projector with a USB cable.
- Setup using EasyMP Network Updater.

This guide explains the USB flash drive and the USB cable methods.



- The following menu settings are not copied by the batch setup function.
  - Network menu settings (except for the Notifications menu and the Others menu)
  - Lamp Hours and Status from the Info menu
- Perform batch setup before adjusting the position of the projectors. Adjustment values for the projected image, such as Keystone, are copied by the batch setup function. If batch setup is performed after adjusting the position of the projectors, the adjustments you made may change.
- By using the batch setup function, the registered User's Logo is copied to the other projectors. Do not register confidential information and so on as the User's Logo.



#### Caution

Performing batch setup is the customers responsibility. If batch setup fails due to a power failure, communication error, and so on, the customer is responsible for any repair costs incurred.

# Setup Using a USB flash drive

This section explains how to perform batch setup using a USB flash drive.



- Use a FAT format USB flash drive.
- The batch setup function cannot be used by USB flash drives that incorporate security functions. Use a USB flash drive that does not incorporate security functions.
- The batch setup function cannot be used by USB card readers or USB hard disks.
- Saving settings to the USB flash drive
- Disconnect the power cord from the projector, and check that all of the projector's indicators have turned off
- Connect the USB flash drive to the projector's USB-A port



- Connect the USB flash drive directly to the projector. If the USB flash drive is connected to the projector through a USB hub, the settings may not be saved correctly.
- Connect an empty USB flash drive. If the USB flash drive contains data other than the batch setup file, the settings may not be saved correctly.
- If you have saved a batch setup file from another projector to the USB flash drive, delete the file or change the file name. The batch setup function cannot overwrite a batch setup file.
- The file name for the batch setup file is PJCONFDATA.bin. If you need to change the file name, add text after PJCONFDATA. If you change the PJCONFDATA section of the file name, the projector may not be able to recognize the file correctly.
- You can only use single-byte characters for the file name.



While holding down the [Esc] button on the remote control or the control panel, connect the power cord to the projector

The status indicator and the power indicator turn blue, and the lamp indicator and the temperature indicator turn orange.

When all of the projector's indicators turn on, release the [Esc] button.



When all of the indicators start flashing, the batch setup file is being written.



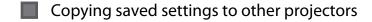
#### !\ Caution

- Do not disconnect the power cord from the projector while the file is being written. If the power cord is disconnected, the projector may not start correctly.
- Do not disconnect the USB flash drive from the projector while the file is being written. If the USB flash drive is disconnected, the projector may not start correctly.

When writing completes normally, the projector turns off, and only the power indicator is lit blue.



When the power turns off, remove the USB flash drive.



Disconnect the power cord from the projector, and check that all of the projector's indicators have turned off

Connect the USB flash drive containing the saved batch setup file to the projector's USB-A port



- When the USB flash drive contains 1 to 3 types of batch setup files, the file for the same model number is copied to the projector. If there are multiple files for a projector with the same model number, the settings may not be copied correctly.
- When there are four or more types of batch setup files on the USB flash drive, the settings may not be copied correctly.
- Do not store any data except for the batch setup file on the USB flash drive. If the USB flash drive contains data other than the batch setup file, the settings may not be reflected copied correctly.

While holding down the [Menu] button on the remote control or the control panel, connect the power cord to the projector

The status indicator and the power indicator turn blue, and the lamp indicator and the temperature indicator turn orange.

When all of the projector's indicators turn on, release the [Menu] button. The indicators turn on for approximately 75 seconds.



When all of the indicators start flashing, the settings are being written.



#### Caution

- Do not disconnect the power cord from the projector while the settings are being written. If the power cord is disconnected, the projector may not start correctly.
- Do not disconnect the USB flash drive from the projector while the settings are being written. If the USB flash drive is disconnected, the projector may not start correctly.

When writing completes normally, the projector turns off, and only the power indicator is lit blue.



When the power turns off, remove the USB flash drive.

# Setup by Connecting the Computer and Projector with a USB Cable



The following operating systems support the batch setup function.

- Windows Vista and later
- Mac OS X 10.5.3 and later
- Saving settings to a computer
- Disconnect the power cord from the projector, and check that all of the projector's indicators have turned off
- Connect the computer's USB port to the projector's USB-B port with a USB cable
- While holding down the [Esc] button on the remote control or the control panel, connect the power cord to the projector

The status indicator and the power indicator turn blue, and the lamp indicator and the temperature indicator turn orange.

When all of the projector's indicators turn on, release the [Esc] button.



The projector is recognized as a removable disk by the computer.

4

Open the removable disk, and save the batch setup file (PJCONFDATA.bin) to the computer



If you need to change the name of the batch setup file, add text after PJCONFDATA. If you change the PJCONFDATA section of the file name, the projector may not be able to recognize the file correctly. You can only use single-byte characters for the file name.

5

Perform "Remove USB device" on your computer, and then disconnect the USB cable



When using OS X, perform "Remove EPSON\_PJ".

The projector turns off and only the power indicator is lit blue.



- Copying saved settings to other projectors
- Disconnect the power cord from the projector, and check that all of the projector's indicators have turned off
- Connect the computer's USB port to the projector's USB-B port with a USB cable
- While holding down the [Menu] button on the remote control or the control panel, connect the power cord to the projector

The status indicator and the power indicator turn blue, and the lamp indicator and the temperature indicator turn orange.

When all of the projector's indicators turn on, release the [Menu] button.



The projector is recognized as a removable disk by the computer.

Copy the batch setup file (PJCONFDATA.bin) that you saved to your computer to the top-level folder of the removable disk



Do not copy any files or folders other than the batch setup file to the removable disk.

Perform "Remove USB device" on your computer, and then disconnect the USB cable



5

When using OS X, perform "Remove EPSON\_PJ".

When all of the indicators start flashing, the settings are being written.



#### Caution

Do not disconnect the power cord from the projector while the settings are being written. If the power cord is disconnected, the projector may not start correctly.

When writing completes normally, the projector turns off, and only the power indicator is lit blue.



# When Setup Fails

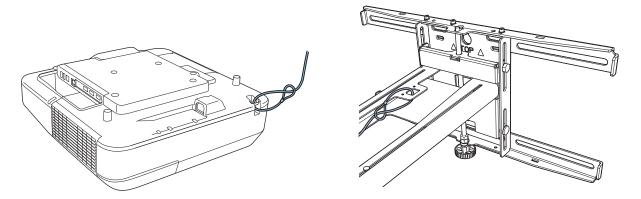
Check	Remedy
Are the lamp indicator and the temperature indicator flashing orange quickly?	The batch setup file may be corrupt, or the USB flash drive or USB cable may not be connected correctly. Disconnect the USB flash
Û □ ; ☐ ; ☐ ; ☐ ; ☐ ; ☐ ; ☐ ; ☐ ; ☐ ; ☐ ;	drive or the USB cable, unplug and then plug in the projector's power cord, and then try again.
Are the power indicator and the status indicator flashing blue quickly, and the lamp indicator and the temperature indicator flashing orange quickly?	Writing the settings may have failed and an error may have occurred in the projector's firmware. Stop using the projector, remove the power plug from the electrical outlet, and contact Epson for help.
⇒	



# Attaching a Security Cable

A commercially available theft-prevention wire lock can be attached to this product.

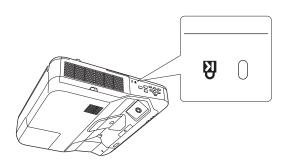
Pass the wire for the theft-prevention wire lock through the security cable installation points on the projector and the setting plate. See the user's guide supplied with the wire lock for locking instructions.



The security slot on this product is compatible with the Microsaver Security System manufactured by Kensington. See the following for more details on the Microsaver Security System.

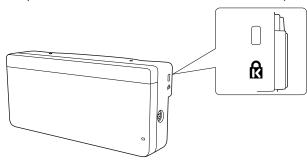
http://www.kensington.com/

Projector



Touch Unit

(cannot be used when attached to bracket)





# General Notice

OS X is a trademark of Apple Inc.

 $Microsoft \, and \, Windows \, are \, trademarks \, or \, registered \, trademarks \, of \, Microsoft \, Corporation \, in \, the \, United \, States \, and \, Corporation \, in \, the \, United \, States \, and \, Corporation \, in \, the \, United \, States \, and \, Corporation \, in \, the \, United \, States \, and \, Corporation \, in \, the \, United \, States \, and \, Corporation \, in \, the \, United \, States \, and \, Corporation \, in \, the \, United \, States \, and \, Corporation \, in \, the \, United \, States \, and \, Corporation \, in \, the \, United \, States \, and \, Corporation \, in \, Corpora$ and/or other countries.

©SEIKO EPSON CORPORATION 2016. All rights reserved.